ACDC
green energy solutions

DISTRIBUTED SOLAR POWER SYSTEMS

Short Form Catalogue 2014

ACDC DYNAMICS

www.acdc.co.za

SOLARLAND

SOLAR DC POWER KITS

Economy Solar home systems are pre-packed kits providing simple power and lighting solutions for applications such as low cost housing and remote rural installations.

	Solar Shed Light	Solar Torch	Solar Camp Light	Solar Desk Lamp
High Quality PV 1000 cycles Lithium Battery Super Bright LED				
Code	**BSL-P0807W**	**BSS-00107**	**BSS-00207**	**BSS-00213**
Battery Type	Lithium	Lithium	Lithium	Lithium
Battery Life	5hrs full charge	7hrs full charge	24/ 6hrs full charge	5/ 11/ 66hrs full charge
Lamp Power/ Lumen	0.4W / 35lm	0.6W / 50lm	1.2/ 0.6W / 110 / 20lm	0.7W / 45lm
PV Panel	0.5W Polycrystalline	1W Polycrystalline	1W Polycrystalline	1W Polycrystalline
Accessories	PV Panel Holder, Pull cord	Lamp Holder	Carry Holder, cell accessories	Cell accessories
Packing Size	125 x 155 x 80mm	165 x 155 x 170mm	145 x 110 x 185mm	160 x 92 x 145mm

	Solar Junior Light	Solar Lantern	Solar Junior Light 2	Solar Home Light	Solar Powerpack 3.0
High Quality PV Rechargeable battery Super Bright LED			 Spare Lamp- **BSS-LAMP**	 Spare Lamp- **BSS-LAMP**	
Code	**BSS-00314LH**	**BSS-00303-2**	**BSS-00311S**	**BSS-00504S**	**BSS-00318**
Battery Type	Lithium	Lead Acid	Lithium	Lithium	Lithium
Battery Life	7hrs full charge	10hrs full charge	18/ 9hrs full charge	72/ 18hrs full charge	High: 4hrs, Low: 11hrs
Lamp Power/ Lumen	1.5W / 120lm	1.2W / 110lm	0.6W / 50lm	0.5W / 50lm	1W
PV Panel	2.5W Polycrystalline	2.5W Polycrystalline	2.5W Polycrystalline	5W Polycrystalline	3W Polycrystalline
Accessories	Cell Accessories	Carry Holder	Cell Accessories	Cell Accessories	Cell Accessories
Packing Size	430 x 160 x 145mm	205 x 170 x 335mm	270 x 160 x 145mm	315 x 270 x 200mm	155 x 145 x 290mm

	Solar Home Light 2	Solar Home Light 3	Solar Complete Home Kit	Solar Complete Home Kit
High Quality PV 1000 cycles Lithium Battery Super Bright LED	 Spare Lamp- **SLL-L1515**	 Spare Lamp- **SLL-L1515**		
Code	**BSS-00504LH**	**BSS-01004LH**	**JY-30**	**JY-60**
Battery Type	Lithium	Lithium	Lead Acid	Lead Acid
Battery Life	8/ 4hrs full charge	18/ 9hrs full charge	8hrs full charge	8hrs full charge
Lamp Power/ Lumen	1.5W / 120lm	1.5W / 120lm	3W / 290lm	5W / 360lm
PV Panel	5W Polycrystalline	10W Polycrystalline	30W Polycrystalline	60W Polycrystalline
Accessories	Cell Accessories	Cell Accessories	DC fan, Cell accessories	15" TV, DC Fan, cell accessories
Packing Size	450 x 160 x 210mm	450 x 240 x 320mm	Mixed package	Mixed package

Due to our policy of continuous improvement we reserve the right of modifying specifications and appearance.

SOL

SOLAR DC POWER KITS

Specifically designed to provide simple lighting and power solutions to remote areas, these kits can be easily adapted for use in applications such as low cost housing, camping etc.

	Solar Barber Kit	Ecoboxx Qube 50	Ecoboxx Qube 90	Ecoboxx Qube 160
High quality PV Rechargeable battery Super bright LED				c/w 100W inverter
Code	**BARBER KIT**	**ECOBOXX 50**	**ECOBOXX 90**	**ECOBOXX 160**
Battery Type	AGM Lithium	AGM Lithium	AGM Lithium	AGM Lithium
Battery Life	Up to 16hrs full charge	Up to 16hrs full charge	Up to 30hrs full charge	Up to 52hrs full charge
Lamp Power/ Lumen	2x2W/ 160lm	2x3W/ 324lm	4x3W/ 324lm	2x3W/ 324lm
PV Panel	2x10W Polycrystalline	5W Polycrystalline	10W Polycrystalline	2x10W Polycrystalline
Accessories	10 in 1 USB phone charger, hair clipper & USB Fan	USB to charge Phone	USB to charge Phone	USB to charge phone
Packing Size	403 x 292 x 355mm	520 x 495 x 393mm	500 x 415 x 373mm	604 x 415 x 373mm

	Solar Travel Light	Portable 4 Lamp Home Kit	Portable 6 Lamp Home Kit	Solar Basic Light
High quality PV Rechargeable battery Super bright LED				
Code	**BX-H09**	**MRD-426**	**MRD-308**	**DE-303**
Battery Type	Lead Acid	Lithuim	Lead Acid	Ni-Mh
Battery Life	80/4hrs full charge	17hrs full charge	10hrs full charge	9hrs full charge
Lamp Power/ Lumen	1W / 380lm	3W / 270lm	3W / 270lm	1W / 120lm
PV Panel	1.7W Polycrystalline	18W Monocrystalline	40W Monocrystalline	5W Polycrystalline
Accessories	Cell accessories, AC Adapter	USB, cell charger	USB, cell accessories	3m cable
Packing Size	165 x 175 x 180mm	Mixed package	Mixed package	430 x 170 x 150mm

	Solar Camping Bag	Solar Carry Bag	Solar Collector	Solar Cell Phone Charger
High quality PV Rechargeable battery Super bright LED			c/w charger	
Code	**BB-01**	**CB-03**	**SC-17PRO**	**ES-130**
Battery Type	Li-Ion	Li-Ion	Li-Ion Battery, 5V 500mAh	Lithium, 3000mAh
Battery Life	4hrs full charge	4hrs full charge	2hrs	Dependant on device
Lamp Power/ Lumen	-	-	-	-
PV Panel	1.2W Amorphous	1.5 Amorphous	Polycrystalline Silicone	0.7W Polycrystalline
Accessories	AC/DC Charger 5V/800mA Phone connectors 4pcs	AC/DC Charger 5V/800mA Phone connectors 4pcs	4 Adaptors	iPhone/ iPod, Blackberry, Samsung

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SOLAR LIGHTING KITS

The outdoor lighting has long been associated with solar technology. ACDC provides another new range of Solar lighting. These products include Solar Panels and batteries.

Internal battery rechargeable Lead Acid Super bright LED

	Security Flood Light IP56	Solar Night Light IP44	Solar Detector Light IP44	Solar Spot Light IP44
		NEW	NEW	NEW
Code	**BSSJ10**	**BSSJ23**	**BSSJ03**	**BSSJ09**
Battery Type	Lead Acid	Lithium	Lithium	Lead acid
Battery Life	8hrs full charge	24hrs full charge	24hrs full charge	8hrs full charge
Lamp Power/Lumen	10W / 550lm	1W / 112lm	3.5W / 378lm	2x2 3W / 500lm
PV Panel	18W Polycrystalline	0.4W Polycrystalline	1.8W Polycrystalline	10W Polycrystalline
Accessories	Mounting kit	Infra-Red Motion Detector	Infra-Red Motion Detector	Mounting kit
Packing Size	280 x 225 x 90mm	120 x 80 x 100mm	180 x 105 x 60mm	300 x 145 x 170mm

High Quality PV Rechargeable Lead Acid battery Super bright LED

	Solar Security Light IP54	High Power Solar Light	Solar Courtyard Light IP44	Solar Flood Light IP44
	NEW	NEW PIR 10m detection & Timesr	NEW	NEW
Code	**BX-GY-02**	**BSSDM02**	**BSSJ22**	**BSSJ12**
Battery Type	Ni-MH	Lead Acid	Lead acid	Lead Acid
Battery Life	24hrs full charge	24hrs full charge	6hrs full charge	8hrs full charge
Lamp Power/Lumen	3W / 310lm	18W / 1485lm	3.5W / 378lm	1.8W / 196lm
PV Panel	1.8W Polycrystalline	12W Polycrystalline	10W Polycrystalline	23W Polycrystalline
Specifications	Mounting kit included	PIR, Day Night Sensor	Mounting kit	PV Panel Holder

High Quality PV Rechargeable Lead Acid battery Super bright LED

	Solar Security Light	Solar Motion Light	Solar Guard Light
	NEW	NEW Top View	NEW
Code	**ESL-09**	**ESL-08**	**BSS7CLPL**
Battery Type	Li-ion 3.7V 8000mAh	Li-ion 3.7V 4000mAh	Lead Acid
Battery Life	4hrs on bright	4hrs on bright	13hrs full charge
Lamp Power/Lumen	7W/700lm	3W/300lm	43W / 460lm
PV Panel	3W Polycrystalline	3W Polycrystalline	10W Polycrystalline
Specifications	PIR Sensor. Off in daytime, Bright light at night	PIR Sensor. Off in daytime, Bright light at night	Day Night Sensor Bulk System

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SOLAR GARDEN LAMPS

Plastic Series
- Batteries Included
- Height does not include spike

Code IP44	RW-SF-03-8	RW-SF-03-2	RW-SF-02-1	RW-SF-03-4
Size (mm)	220H x 115Ø	310H x 120Ø	420H x 138Ø	200H x 115Ø
Type	1 x LED	1 x LED	1 x LED	1 x LED
Batteries	1 x NiMh 600mAh	1 x NiMh 600mAh	1 x NiMh 600mAh	1 x NiMh 600mAh

Stainless Steel Series
- Batteries Included
- Height does not include spike

Code IP44	RW-SLS004	E2009	RW-SLS001	RW-SLS002
Size (mm)	260H x 115Ø	200H x 150Ø	420H x 150Ø	420H x 115 x 175
Type	1 x LED	1 x LED	1 x LED	1 x LED
Batteries	1 x NiMh 600mAh	1 x NiMh 600mAh	1 x NiMh 600mAh	1 x NiMh 600mAh

Stainless Steel Series
- Batteries Included
- Height does not include spike

With Mosquito Repeller
Lawn & Table Light

Code IP44	RW-SLS003	SDBX115	ESL-10	SL-04M
Size (mm)	290H x 125Ø	420H x 170Ø	800mm (H)	510(H) x Ø110mm
Type	1 x LED	1 x LED	1 x LED	1 x LED
Batteries	1 x NiMh 600mAh	1 x NiMh 600mAh	Li-ion Battery Rechargable	Li-ion Battery, 3.7V 450mAh

Stainless Steel In-ground Series
IP44
- Batteries Included

**Battery life: 3yrs

Code	RW2LED-120	RW3LED-120	SDDM002	SDDM002-2
Size (mm)	120Ø x 35D	120Ø x 35D	125 x 125	125 x 125
Type	2 x white LED	3 x white LED	4pcs Superbright white LED	RGB colour changing
Batteries	1 x NiMh 600mA	2 x NiMh 600mA	NiMh 600mAh	NiMh 600mAh

Aluminium Paving Lamp
IP44

Plastic Floating Lamp
IP67

Plastic Spot Lamp
IP67

Code	RW-SLR001	RWSLB003	RW-SLB002	RW-SLP006
Size (mm)	120Ø x 35D	120Ø	160Ø	160D x 85W x 330H
Type	1 x LED	2 x LED	2 x LED	1 x LED
Batteries	1 x NiMh 600mA	1 x NiMh 600mA	1 x NiMh 600mA	1 x NiMh 600mA

Replacement Batteries - Ni-MH

BC1

AA (1.2V)

N1800AA (1800mAh)
N2300AA (2300mAh)
N2500AA (2500mAh)
N2800AA (2800mAh)

AAA (1.2V)

N750AAA (750mAh)
N800AAA (800mAh)
N1000AAA (1000mAh)

LIT

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LED SOLAR LIGHTS

c/w motion sensor

c/w Daylight sensor

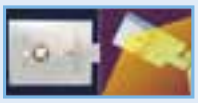
Code	RW-X12A	RW-X12B	LS48M-2	LS48M-5
Rated Power	16pcs 3528 LED	16pcs 3528 LED	2 W (Watts), 120Lm	5 W (Watts), 240Lm
Battery	3.7V, 800mAh	3.7V, 800mAh	3.7V 2000mA	7.4V 2000mA
PV Panels	1.0W Amorphous	1.0W Amorphous	2W Amorphous	5W Monocrystalline
Working time	8hrs (fully charged)	50 sec (PIR sensor)	30 sec (PIR sensor)	30 sec (PIR sensor)
Detection distance	-	2m	5-7m	5-7m
Dimensions	80H x 95W x 125D	80H x 95W x 125D	55H x 221W x 320D	55H x 221W x 320D

COMPACT SOLAR STREET LIGHTING IP65

5-10W - *Self-contained*

(Top View)

** Pole not included*



20-40W - *Split Module*

- Ideal for Eco Estates.
- All in one Battery and Solar panel
- Colour Temp: 6000-7000k
- Light is dim when no movement
- Low cost installation - no cabling
- PIR Sensor
- c/w Lithium battery in body
- Luminosity is increased when a person is detected by PIR Sensor

Code	LS48-5	LS48-8	LS48-10	LS48-20	LS48-30	LS48-40
Power	5W	8W	10W	20W	30W	40W
Solar Module	12W	18W	23W	70W	100W	135W
Lumen Bright Mode	410lm	680lm	810lm	1600lm	2400lm	3200lm
Lumen Dim Mode	120lm	200lm	270lm	800lm	1200lm	1600lm
Working Time	8hrs (bright) 24hrs (dim)	8hrs (bright) 24hrs (dim)	10hrs (bright) 30hrs (dim)	10hrs (bright) 30hrs (dim)	10hrs (bright) 30hrs (dim)	10hrs (bright) 30hrs (dim)
Installation Height	2.5-3m	3-4m	3-5m	5-8m	8-10m	8-10m
Dist. btwn.Poles	8-10m	10-15m	13-18m	20m	25m	25m
LUX	8.6lux @3m	9.4lux @ 4m	7.9lux @ 5m	9.2lux @ 20m	8.9lux @ 25m	8.9lux @ 25m
Size - *LxWxD*	568 x 306 x 56mm	688 x 306 x 56mm	818 x 306 x 56mm	892 x 817 x 228mm	892 x 817 x 228mm	1252 x 817 x 228mm

SOLAR GARDEN LIGHTING

Solar garden lights are self contained units for parks, complex's and housing developments.

These lights are easy to install and low to no maintenance is required.

These systems are complete kits.

- Maintenance free
- Sealed battery c/w Battery Box

Code	LM-TT011	LM-TT012
Light Led	15W	12W *2
Solar Panel	40W/18V	70W/18V
Controller	12V/5A	12V/5A
Battery	50AH/12V	80Ah/12V
Pole Height	3M	3M
Battery Life	8hrs	8hrs

STREET LIGHTING

Accessories

LU56W-24VDC

SOL-10/24

BAT-BOX1

LIT

Code	Description
SOL-10/24	10A/ 24V controller
LU56W-24VDC	LED light 24VDC, cool white(5500K) 28LUX @ 8m IP65. Spigot size 60mmØ
BAT-BOX1	Battery Box for 2 x 80AH/12V batteries + solar controller Size: 560 x 410 x 250mm

This controller has an advanced light-control function with an incorporated daylight switch.

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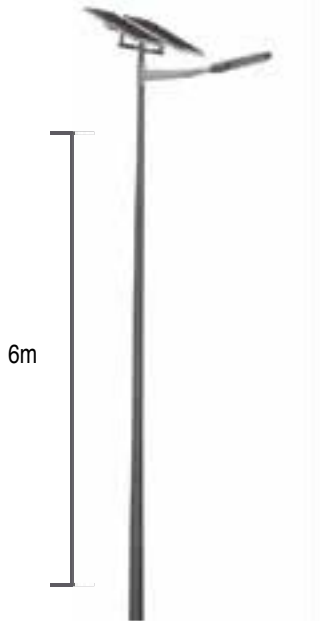
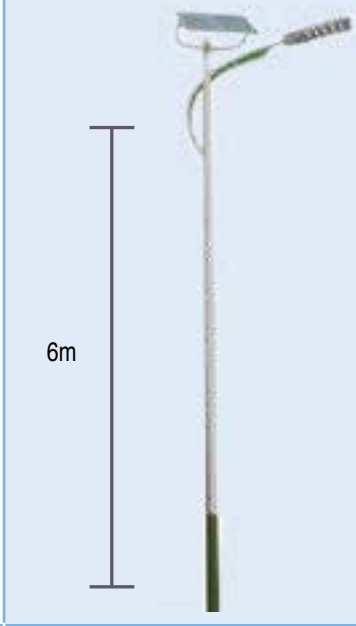
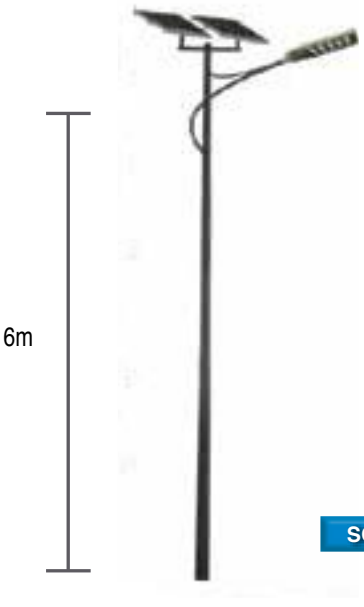
NEW

SOLAR STREET LAMPS IP65







SOL

Code	SL-30W	SL-60W	SL-90W
Light Source	12V 30W LED Lamp	24V 60W LED Lamp	24V 90W LED Lamp
Luminous flux	2700lm	5400lm	8100lm
Colour Temp	6500K (Daylight)	6500K (Daylight)	6500K (Daylight)
Housing material	Tempered glass and Die-cast Aluminium	Tempered glass and Die-cast Aluminium	Tempered glass and Die-cast Aluminium
Solar Panels	40W*2pcs Mono Crystalline	80W*2pcs Mono Crystalline	120W*2pcs Mono Crystalline
Battery	AGM 12V 65AH	AGM 12V 65AH x 2pcs	AGM 12V 100AH x 2pcs
Controller	12V 10A - PWM charging mode Protection against over charge/discharge, Overload & short circuit Integrated day/night switching	12V 10A - PWM charging mode Protection against over charge/discharge, Overload & short circuit Integrated day/night switching	24V 10A - PWM charging mode Protection against over charge/discharge, Overload & short circuit Integrated day/night switching
Battery Box	PP Plastic	PP Plastic	PP Plastic
Pole	6M, steel, hot dip galvanised	6M, steel, hot dip galvanised	6M, steel, hot dip galvanised
Working time	8hrs per day	8hrs per day	8hrs per day
Max endurance	3 consecutive rainy days	3 consecutive rainy days	3 consecutive rainy days

Components included:

Code	JYSL-8003-AD50	JYSL-8003-AS65	JYSL-8003-DS40	JYSL-8003-FS15

Complete with solar panel, battery and controller.
Many different styles are available with various lighting options and battery configurations.
Please contact our sales team with your requirements for further information.

SOL

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SOLAR STREET LAMPS

NEW

Eco-Friendly

c/w Built-in day/night switching function

SOL

Code	SGL-A-3501	SGL-A-3502	SGL-A-3505	SGL-B-4001	SDGG307
Height	4m	4m	4m	4m	2.2m
Light Source	12V 9W LED Lamp	12V 9W LED Lamp	12V 9W LED Lamp	2pcs 12V 9W LED Lamp	12V 1.2W LED Lamp
Luminous Flux	550±50lm	550±50lm	550±50lm	700±70lm	80lm
Solar Panel	35W Mono Crystalline	35W Mono Crystalline	35W Mono Crystalline	40W Mono Crystalline	3.5W Mono Crystalline
Battery	12V40AH AGM Battery	12V40AH AGM Battery	12V40AH AGM Battery	12V40AH AGM Battery	3.2V 6Ah Lithium
Post	Galvanised steel with plastic	Galvanised steel with plastic	Galvanised steel with plastic	Galvanised steel with plastic	Glass Fibre reinforced
Working Time	spray treatment	spray treatment	spray treatment	spray treatment	plastic pole
Endurance	10hrs per day 4 consecutive rainy days	10hrs per day 4 consecutive rainy days	10hrs per day 4 consecutive rainy days	10hrs per day 4 consecutive rainy days	8hrs per day 5 consecutive rainy days

DC APPLIANCES

	DC TV	DC Ceiling Fan	DC Fan	DC Freezer
Code	**JY-60TV**	**SLE-F2001HD**	**SF-D6609**	**SLA-0145**
Rated Power	-	20W	16W	45W
Voltage	12VDC/ 230VAC	12VDC	12VDC	12/ 24VDC
Specifications	15" Colour LCD TV	Metal construction	9" inch, aluminium, chrome	45lt capacity, temperature
Packing Size	Antenna not included 450 x 380 x 125mm	3 blades, 1 speed 210 x 210 x 180mm	3 blades, 2 speed 300 x 120 x 290mm	-10°C to 18°C 570 x 745 x 545mm

DC ENERGY SAVING LAMPS

FE1

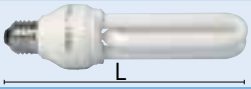
FE27

FE36

DC Lamps 8000 Hours Life

Code	Code	Watts	Length (mm)	Lumen
FE1-7-E27**	FE1-7-B22**	7W	124	238lm
FE1-9-E27**	FE1-9-B22**	9W	136	367lm
FE1-11-E27**	FE1-11-B22**	11W	146	449lm
*Add "**-CW**" for cool white or "**-WW**" for warm white at end of code. eg. **FE1-7-E27-CW**				
FE27-15-E27**	FE27-15-B22**	15W	139	701lm
FE27-20-E27**	FE27-20-B22**	20W	164	935lm
*Add "**-CW**" for cool white or "**-WW**" for warm white at end of code. eg. **FE27-15-E27-CW**				
–	FE36-5-B22-WW*	5W	108	180lm
–	FE36-7-B22-WW*	7W	108	270lm
–	FE36-9-B22-WW*	9W	117	400lm
–	FE36-11-B22-WW*	11W	136	500lm

* Supply Voltage: **12VDC, 24VDC, 48VDC**



DC Lamps 15 000 Hours Life

CFI-9-E27-12VDC	–	9W	140	367lm

12VDC LED Flood Lights

Code	Power	Lumen	Size (mm)
FL1-DC-*-12VDC	10W	100lm/W	115 x 86 x 86
FL3-DC-20W-*-12VDC	20W	100lm/W	225 x 185 x 160
FL3-DC-30W-*-12VDC	30W	100lm/W	225 x 185 x 160

* Add colour to code: ○ **CW** *(Cool White)*, ○ **WW** *(Warm White)*

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LED BULBS

Non-Dimmable

LED Golf Ball Lamps Frosted — Supply Volts: 85-260VAC

Code	LED Power	Base	Lumen	Beam
T-LEDG50R-E14-*	3W	E14	245lm	180˚
T-LEDG50R-E27-*	3W	E27	245lm	180˚
T-LEDG50R-B22-*	3W	B22	245lm	180˚

Non-Dimmable

LED Candle Lamps Frosted — Supply Volts: 85-260VAC

T-LEDB35R-E14-*	3W	E14	245lm	180˚
T-LEDB35R-E27-*	3W	E27	245lm	180˚
T-LEDB35R-B22-*	3W	B22	245lm	180˚

Non-Dimmable

LED Lamps — Supply Volts: 85-260VAC

T-LED-5W-E27-*	5W	E27	450lm	270˚
T-LED-6W-E27-*	6W	E27	540lm	270˚
T-LED-5W-B22-*	5W	B22	450lm	270˚
T-LED-6W-B22-*	6W	B22	540lm	270˚

*Add colour to code: ○ **PW** *(Pure White) 5000-5500K*, ○ **WW** *(Warm White) 3000K*.

Non-Dimmable

LED Lamps — Supply Volts: 85-260VAC

Code E27	Code B22	LED Power	Lumen	Beam
HS-E27-8W-*	HS-B22-8W-*	8W	520-560lm	160˚
HS-E27-10W-*	HS-B22-10W-*	10W	680-730lm	160˚
HS-E27-12W-*	HS-B22-12W-*	12W	720-760lm	270˚

For all of the above items *add colour to code: ○ **CW** *(Cool White) 4000K*, ○ **WW** *(Warm White) 3000K*.

Non-Dimmable 12VDC

LED High Bright Light Bulb - Only Cool White — Supply Volts: 8-18VDC

Code	LED Power	Lumen	Base
SLL-L2401D	1.2W	100lm	E27
SLL-L2403D	3W	250lm	E27
SLL-L2405D	5W	450lm	E27

INNOVOLT POWER PROTECTOR (MANAGER)

This essential electronics protection appliance continuously monitors AC power using advanced microprocessor-based technologies and remediates against the ill effects of power disturbances. With LCD screens alerting to issues immediately, the Power Manager provides deluxe protection and monitoring. In conjunction with the Power Doctor or Power Doctor SmartPhone Adaptor and the Innovolt Management Cloud, you can graphically view and analyze the number and type of disturbances your Innovolt appliance has protected against.

PM16

PM30

PD2 - Power Doctor

PDSA100 - Power Doctor Smart Phone Adaptor

	Power Managers		Accessories	
Code	**PM16**	**PM30**	**PD2**	**PDSA100**
Nominal Operating Voltage	230VAC 50Hz	220 - 240VAC 50Hz	• Optical communication from all Innovolt power products • USB communication to any PC • LCD shows disturbance history • Data available for analysis from any web-enabled device via the Innovolt Management Cloud	• Plugs into smartphone and using the Innovolt App, optically reads data from LEDs on the Innovolt power appliances • Apple iOS compatible • Data available for analysis from any web-enabled device via the Innovolt Management Cloud
Max Continuous Current	16A	30A		
Interrupt Rating per UL Standard 1077	3500A	3500A		
Catastrophic Overvoltage Disconnect Time	<8ms	<8ms		
Over Voltage Limit	>260VAC ± 4V	>260VAC ± 4V		
Under Voltage Limit	<180VAC ± 4V	<180VAC ± 4V		
Overvoltage Clamping Voltage	L-N 800V, L-G 800V, N-G 800V	L-N 900V, L-G 800V, N-G 800V		
Size (mm)	57.2H x 152.4W x 228.6L	8.9H x 210.1W x 290.1L		

Features

- Microprocessor-based protection algorithms
- LCD display shows disturbance history
- Compatible with the Power Doctor and Power Doctor SmartPhone Adaptor
- Industry leading defense against current inrush resulting from voltage sags & brownouts
- Ultra-fast reaction to dangerous over voltage
- Post-blackout reclose sequence protection
- 3-Stage MOV protection against voltage surges
- 4th order, two stage EMI/RFI filtering
- Data & telephone protection circuits
- UL listed

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LED ROAD LIGHTING

Solar Powered Road-Side Warning Lights

	Single Sided	Double Sided	Pole Mount Ø 26mm	Pole Mount Ø 50mm
Code	**RH-4803-Y**	**RH-4804-Y**	**RH-4603-Y**	**H-931-Y**
Battery Inc.	1.5V/1200mAh (Ni-Cd)	1.5V/1200mAh (Ni-Cd)	1.2V/1800mAh (Ni-Cd)	2V/2.5Ah (Lead-Acid)
LED Qty	2 pc (8mm)	2 pc (8mm) x 2	6 (10mm)	8 x 1 (5mm)
Flash Rate	65 Flashes/min	65 Flashes/min	150 Flashes/min	120 Flashes/min
Size (mm)	326 x 163 x 29	326 x 163 x 29	Ø115 x 65 x 166	Ø386 x 100
Colour	Yellow (other colours on request)			

Solar Powered LED warning Beacons IP65

Code	**XHL-C6009-2-*-†**	**XHL-C6009-1-*-†**	**XHL-R005**	**XHL-R007**
Battery Inc.	6V/ 10Ah (Lead-Acid)	6V/ 20Ah (lead-Acid)	12V/17Ah (Lead-Acid)	12V/17Ah (Lead-Acid)
LED Qty	33 (5mm)	60 (5mm)	29	44
Flash Rate	60 Flashes/ min	60 Flashes/ min (flowing)	24 Flashes/min	2 Flashes/min
Size (mm)	750 x 600 x 60	1600 x 480 x 60	800H x 600W	800H x 600W
Colour	*Add LED colour to code: ● **Y** (Yellow), ● **R** (Red) †Add arrow direction: **L** (Left), **R** (Red)		Black and Amber	Black, Amber and Red

IP68

Code	**HAN700-***
Light Intensity	25Candela
Controls	On/Off-Intensity-Pattern
Light Intensity	25 / 50 / 75 / 100%
Light Pattern	Flash or Steady
Range 360°	Flash 7Km / Steady 4Km
Solar Cell	2Wp
Battery	8AH
Battery Life	3 - 5 Yrs
Size (mm)	Ø227 x H212
Approval	EN 61547:2009

* Add colour to code: ● **R** *(Red)*, ● **G** *(Green)*, ● **B** *(Blue)*, ● **A** *(Amber)*, ○ **W** *(White)*

Code	**SSL-CL9-*-****
Solar Panel	5.5V/100mA Mono Crystalline Silicone
Battery	3.6V/1400mAh
Visibility	±600m
Effective Light	5 Lumens (2200mcd)
Size	109 x 90mm

*Add colour to code: ● **Y** *(Yellow)*, ● **R** *(Red)*, ● **BL** *(Blue)*, ○ **W** *(White)*

Add operating mode to code: **C=Constant On, **F**=Flash, **R**=Revolve

SSL-CL9-ST

For mounting **SSL-CL9-*-**** to Traffic cone or pole

Solar Warning Light IP67 - Size: Ø166 x 155H

Code		**DWS301-***	**DWS302-***
Type		Steady on	Flashing
Night Visibility		4.3km	4.3 - 6.3km
Max Power		1.1 watt	1.1 watt
Effective Light Candela (cd)	Red	5.0-7.5 cd	8.0-12.0 cd
	Amber	7.5-10.0 cd	12.0-16.0 cd
	Blue	3.0-4.0 cd	5.4-7.2 cd
	Green	6.5-7.5 cd	10.4-12.0 cd
	White	7.5-10.0 cd	12.0-16.0 cd
Battery (Nickel-Hydrogen)		5.0Ah NiH2	5.0Ah NiH2
Operating Time		120Hrs	300Hrs

*Add colour to code: ● **R** (Red), ● **A** (Amber), ● **BL** (Blue), ● **GN** (Green), ○ **W** (White)

Due to our policy of continuous improvement we reserve the right of modifying specifications and appearance.

ALL

SOLAR BATTERY CHARGERS

Code	SLP10F-12	SLP20F-12	SLP80F-12	SLP120F-12
Max Power	10W	20W	80W	120W
Voltage Pmax (Vmp)	17.0V	17.2V	17.2V	17.2V
Current Pmax (Imp)	0.58A	0.87A	4.56A	6.98A
Open Voltage (Voc)	21.6V	21.6V	22.84V	22.89V
Short circuit current	0.68A	0.96A	5.17A	7.72A
Package size	302 x 357 x 30mm	576 x 357 x 30mm	720 x 150 x 635mm	1070 x 610 x 140mm

FOLDABLE / FLEXIBLE SOLAR PANELS

	Foldable			Semi-Rigid
3m extension cable Cellphone accessories Heavy-duty material				NEW
Code	**SHB-10W**	**SHB-20W**	**SHB-50W**	**SLP10F-12A**
Max Power	10W	20W	50W	10W
Voltage Pmax (Vmp)	17.42V	17.46V	17.7V	17.0V
Current Pmax (Imp)	0.57A	1.18A	2.87A	0.61A
Open Voltage (Voc)	21.2V	21.6V	21.8V	21.8V
Short circuit current	0.62A	1.29A	3.1A	0.69A
Package size	220 x 320 x 40mm	220 x 320 x 40mm	360 x 450 x 60mm	350 x 30 x 358mm

Flexible Semi-Rigid

	NEW	NEW	NEW	NEW
Code	**SLP20F-12A**	**SLP30F-12A**	**SLP40F-12A**	**SLP50F-12A**
Max Power	20W	30W	40W	50W
Voltage Pmax (Vmp)	17.4V	17.4V	17.6V	17.7V
Current Pmax (Imp)	1.25A	1.67A	2.5A	2.95A
Open Voltage (Voc)	21.8V	21.9V	22.6V	22.8V
Short circuit current	1.41A	1.78A	2.89A	3.5A
Package size	350 x 30 x 358mm	375 x 30 x 635mm	375 x 30 x 795mm	475 x 40 x 955mm

Flexible

Code	FX320	FX680	FX1440
Max Power	32W	68W	144W
Voltage Pmax (Vmp)	16.5V	16.5V	33.0V
Current Pmax (Imp)	1.94A	4.10A	4.56A
Open Voltage (Voc)	23.8V	23.1V	46.2V
Short circuit current	2.4A	5.10A	5.30A
Package size	1380 x 400mm	2849 x 394mm	5486 x 394mm

Features:
- Portable
- Flexible construction
- Ultra Light-weight
- Laminated on Polymer
- Higher Energy yield per Wp

Applications:
- Boating
- Camping
- Water pumping
- Rural Electrification

Standards:
- IEC 61646
- IEC 61730

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SOLAR PV MODULES

ACDC offers a range of Polycrstalline panels designed for both On-Grid and Off-Grid applicatons.
All panels are constructed using the higest quality components and are CE certfied according to the IEC61215:1995 standard.
All ACDC panels are covered by our 25 year warranty.

(Poly) Multicrystalline PV Module (Lower cost)

Code	Maximum Power (Pmax)	Voltage @ Pmax (Vmp)	Current @ Pmax (Imp)	Open-Circuit Voltage (Voc)	Short-Circuit Current (Isc)	Dimensions L x W x H
SLP005-12	5W	17.0V	0.29A	21.6V	0.34A	270 x 222 x 30mm
SLP010-12	10W	17.0V	0.58A	21.6V	0.68A	357 x 302 x 30mm
SLP020-12	20W	17.2V	1.16A	21.6V	1.31A	550 x 359 x 30mm
SLP030-12	30W	17.4V	1.72A	21.5V	1.89A	680 x 426 x 30mm
SLP040-12	40W	17.4V	2.30A	21.5V	2.53A	650 x 665 x 30mm
SLP050-12	50W	17.4V	2.87A	21.5V	3.18A	650 x 665 x 30mm
SLP060-12	60W	17.4V	3.74A	21.5V	4.11A	800 x 675 x 35mm
SLP080-12	80W	17.4V	4.58A	21.5V	5.03A	1005 x 675 x 35mm
SLP090-12	90W	18.0V	5.00A	21.7V	5.40A	1195 x 541 x 35mm
SLP100-12	100W	17.4V	5.74A	21.5V	6.36A	1240 x 675 x 35mm
SLP120-12	120W	17.4V	7.75A	21.5V	8.52A	1490 x 675 x 35mm
SLP130-12	130W	18.3V	7.10A	22.0V	7.80A	1370 x 675 x 35mm
SLP140-12	140W	18.3V	7.66A	22.0V	8.23A	1482 x 676 x 35mm
SLP135-24	135W	36.2V	3.73A	43.8V	8.06A	1020 x 992 x 35mm
SLP170-24	170W	34.8V	4.88A	43.4V	5.36A	1300 x 992 x 50mm
SLP180-24	180W	34.8V	5.17A	43.4V	5.68A	1482 x 992 x 50mm
SLP210-24	210W	29.0V	7.24A	36.3V	7.65A	1636 x 992 x 35mm
SLP240-24	240W	30.1V	8.00A	37.3V	8.64A	1640 x 992 x 50mm
SLP260-24	260W	34.9V	7.44A	43.7V	8.18A	1956 x 992 x 50mm
SLP270-24	270W	34.9V	7.73A	43.7V	8.50A	1956 x 992 x 50mm
SLP290-24	290W	36.5V	7.94A	44.0V	8.59A	1956 x 992 x 50mm

Monocrystalline PV Modules

SLP090S-12	90W	17.4V	5.17A	21.5V	4.48A	1195 x 541 x 35mm
SLP100S-12	100W	18.8V	5.3A	22.5V	5.83A	1195 x 541 x 35mm
SLP180S-24	180W	34.8V	5.17A	43.8V	5.55A	1580 x 808 x 40mm
SLP200S-24	200W	37.7V	6.85A	45.0V	7.25A	1580 x 808 x 40mm

Mechanical Characteristics

Solar Cells: Multicrystalline or Monocrystalline Solar cells
Construction: Front High-transmission 3.2mm tempered glass; Encapsulate: EVA; Back: TPT
Frame: Clear anodized aluminium alloy (silver colour)

Module Warranty

- 25 year limited warranty of 80% power output;
- 10 year limited warranty of 90% power output;
- 5 year limited warranty of materials and workmanship.

NEW

CIS THIN FILM SOLAR PANELS

Dimensions: 1257 x 977 x 35mm
Weight: 20kg
Maximum Load: 2400Pa

Highlights of CIS Technology

- Production output in unfavourable conditions
- Excellent low light performances
- Light soaking effect raises output after installation
- Low shadow tolerance

High temperature stability

- Aesthetically pleasing in black appearance

Code	SF150-S
Nominal Power	150W
Open Circuit Voltage	108.0V
Short Circuit Current	2.20A
Current at Nominal Power	1.85A
Voltage at Nominal Power	81.5V

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SOLAR CHARGE CONTROLLERS

Electronically regulated charging: Boost and float charge, Deap discharge protection PWM regulation. Fully electronically protected: Panel surge, wrong polarity at the panel or battery, overload and short circuit at load. **CML** Range: Automatic 12/ 24 Volt detection, boost, equalize and float charging

4 LED indications: charge status, SOC, LVD, Overload/ short circuit			c/w Built-in Day/ Night Sensor			NEW
Code	**CA-08**	**CML-05**	**CML-08DS**	**CML-10**	**CML-20**	**SLC-NR24***
Max module current	8A	5A	8A	10A	20A	**10A / 20A** (*Add to Code)
Max load current	8A	5A	8A	10A	20A	10A/20A
Voltage	12V	12/ 24V	12/ 24V	12/ 24V	12/ 24V	12V/24V
Display	2 x LED, 1 x Duo-LED	2 x LED, 1 x Duo-LED	2 x LED, 1 x Duo-LED	2 x LED, 1 x Duo-LED	2 x LED, 1 x Duo-LED	LED
Self consumption	<4mA	<4mA	<4mA	<4mA	<4mA	<15mA
Dimensions	80 x 100 x 32mm	80 x 100 x 32mm	80 x 100 x 32mm	80 x 100 x 32mm	80 x 100 x 32mm	168 x 88 x 34mm

ECO PWM CHARGE CONTROLLER

The **SLX** range of solar controllers are optimally suited for inverter systems. The charging can be individually set up by using four buttons behind the front casing. Multi-stage charging technology + PWM control. Integrated self test function.

LCD indications: Battery voltage PV Wattage Charge current	NEW	NEW	NEW	NEW	NEW
Code	**SLX-10**	**SLX-20**	**SLX-30**	**SLX-40**	**SLX-4***
Max module current	10A	20A	30A	40A	***10**A/ **40**A (Add to code)
Max load current	10A	20A	30A	10A	10A/ 40A
Voltage	12/ 24V	12/ 24V	12/ 24V	12/ 24V	48V
Max Voc	< 47VDC	< 47VDC	< 47VDC	< 47VDC	< 47VDC
Display	LCD	LCD	LCD	LCD	LCD
Self consumption	12.5mA	12.5mA	12.5mA	12.5mA	25mA
Dimensions	187 x 95 x 44mm	187 x 95 x 44mm	187 x 95 x 44mm	187 x 128 x 49mm	187 x 128 x 49mm

SOLAR CHARGE CONTROLLER

The SunStar is a highly reliable solar battery charger and its most critical feature is to maximize the harvest energy from the PV array into the battery by using either advanced Maximum Power Point Tracking (MPPT) technology or Pulse Width Modulation (PWM) control.

LCD indications: Battery voltage PV Wattage Charge current			NEW		NEW
Code	**SS-30C**	**SS-45C**	**SS-50C**	**SS-60C**	**SS-80C**
Max module current	30A	45A	50A	60A	80A
Max load current	30A	45A	50A	60A	80A
Voltage	12/ 24/ 48V	12/ 24/ 48V	12/ 24/ 36/ 48V	12/ 24/ 48V	12/ 24/ 36/ 48V
Control Method	PWM	PWM	MPPT	PWM	MPPT
Display	LED	LCD	LCD	LCD	LCD
Max Voc	140VDC	140VDC	240VDC	140VDC	240VDC
Dimensions	65 x 236 x 35mm	266 x 127 x 75mm	415 x 225 x 147mm	266 x 127 x 75mm	498 x 393 x 147mm

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BATTERIES

ACDC Batteries use special alloyed calcium-lead which leads to extermely low levels of "Electrolyte decrease". Therefore there is no need to top up with distilled water if the charging system remains error free.

- Complete protection against reduction of sulfuric acid
- Consistent starting performance

Sealed Lead Acid

M Solar Cells

Deep cycle Calcium Lead Acid

Life span 3 to 5 years in standby service

Code	Type	Nominal Voltage	Nominal Capacity	Terminal type	Size (mm)
SY612	Lead Acid	6V	1.2AH	Lug	96 x 72 x 84
SY632	Lead Acid	6V	3.2AH	Lug	125 x 33 x 72
SY640	Lead Acid	6V	4.0AH	Lug	70 x 47 x 107
SY640-S	Lead Acid	6V	4.0AH	Lug	65 x 33 x 75
SY1245	Lead Acid	12V	4.5AH	Lug	90 x 70 x 107
SY1270	Lead Acid	12V	7.0AH	Lug	150 x 65 x 102
SY12012	Lead Acid	12V	12.0AH	Lug	151 x 98 x 102
SY12024	Lead Acid	12V	24.0AH	Lug	165 126 x 173
SY12035	Calcium Lead	12V	35.0AH	SAE Post	230 x 200 x 135
SY12045	Calcium Lead	12V	45.0AH	SAE Post	230 x 240 x 135
SY12065	Calcium Lead	12V	65.0AH	SAE Post	230 x 265 x 190
SY12080	Calcium Lead	12V	80.0AH	SAE Post	226 x 352 x 175
SY120102	Calcium Lead	12V	102.0AH	Nut	240 x 335 x 175
SY120200	Calcium Lead	12V	200.00AH	SAE Post	245 x 520 x 280

BATTERY TESTER

Features:

- Simultaneously test voltage, resistance and battery capacity
- Auto-calibration function to enhance testing accuracy
- Fast testing of battery or string, results are automatically saved
- USB connection for software updating and data transfer to PC
- Powerful PC management software for data storage and analysis
- Audible alarm and over voltage protection
- Easy navigation via the colour touch screen and keyboard

Code	PITE3915
Description	Portable battery tester for batteries
	Suitable for cell voltages: 1.2V, 2V, 6V and 12V
	Suitable for 5Ah - 6000Ah batteries
	Tests cell resistance and voltage to help eliminate weak batteries and ensure optimal performance of the system
	3000 cell test results stored in memory

Technical Specifications

Resistance range	0.00mΩ ~ 100mΩ
Test resolution/ accuracy:	
Resistance	0.1mΩ/ ±1.0% of rdg
Voltage	1mV/ ±0.2% of rdg
Battery	Li-ion
Battery Life	More than 8 hours
Testing Capacity	1-254 cells per string
Voltage range	0-220V
Display	320 x 240 Pixel TFT
Size	210 x 110 x 60mm

SOLAR AC HOME SYSTEM

Complete single phase solar power solution for use in a home. The kit includes all the components needed to make the switch over to solar quick and easy. The integrated display allows the user to have all the information about the status of the system at their fingertips.

Price includes:

Batteries & PV panels incl.
Inverter
Solar regulators
Mains isolator
DC Disconnector
LCD Display

*** Solution excludes PV mounting system and wiring.**

Code	DE-H150	DE-H250	DE-H350	HYB001-6	HYB001-8	DE-H10K
Description	500W Power Pack	1000W Power Pack	3000W Power Pack	6000W Power Pack	8000W Power Pack	10000W Power Pack
Max power rating	500W	1000W	3000W	6000W	8000W	10000W
Max current	2.5A	4.5A	12.5A	25A	32A	42A
Battery	80AH	4 x 100AH	8 x 100AH	20 x 100AH	24 x 100AH	36 x 100AH
Solar Panels	80W	2 x 220W	4 x 220W	12 x 270W	14 x 270W	20 x 220W
Output voltage	220-240± 1%					
Input voltage	12VDC	12VDC	12VDC	48VDC	48VDC	48VDC
Standby Time	6hrs	7hrs	8hrs	10hrs	10hrs	10hrs

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MOBILE POWER BACKUP SYSTEMS

Mobile UPS - Modified sine wave output 230VAC single phase, to be used for home or office during power cuts. All in one inverter/ charger/ auto change over/ battery pack and trolley

Input voltage 12VDC/ 230VAC
Overload protection
Over/ under voltage protection

Solar System

Code	EPS-1000B	EPS-1500B	EPS-2000B	EPS-2000D	PP-1500	PP-2000	PP-3000
Constant watts	1000W	1500W	2000W	2000W	1500W	2000W	3000W
Peak watts	2000W	3000W	4000W	4000W	3000W	4000W	6000W
Voltage	12VDC	12VDC	12VDC	13.5 - 20VDC	12VDC	12VDC	12VDC
Back-up time full load	1.2hrs	0.8hrs	0.6hrs	0.6hrs	1.6hrs	1.2hrs	0.8hrs
Back-up time +102Ah	2.4hrs	1.6hrs	1.2hrs	1.2hrs	2.4hrs	1.8hrs	1.2hrs
Back-up time +4x102Ah	6hrs	4hrs	3hrs	3hrs	4.8hrs	3.6hrs	2.4hrs
Accessories	(4 batteries)	(8 batteries)	(16 batteries)				
Battery Boxes	**BAT-A4**	**BAT-A8**	**BAT-A16**				
Box Size	420 x 450 x 670	760 x 450 x 770	780 x 455 x 1360				

Specifications:
- Modified sine wave 210-230VAC
- Robust industrial wheels
- **EPS-2000D** 180W PV Panel, 20A Controller

DC TO AC INVERTERS

* Calculations for power
Power tool W x 3 = 100W x 3 = 300W

Code	PM-A-150-SA	PM-A-300-SA	PM-A-600-SA	PM-A-1000-SA
Maximum power	150W	300W	600W	1000W
Peak power	250W	500W	1000W	1500W
Input volts	10-40VDC	10-14VDC	10-14VDC	10-14VDC
Dimensions	150 x 190 x 170mm	420 x 215 x 140mm		340 x 335 x 250mm

Features:
- Low voltage LED
- Overload LED
- Output Volt 230VAC/ +/ -8%
- DC to AC isolation
- Short circuit protection

Applications:
Radio's, TV, Cellphones
Energy saving lamps
Power tools
Do Not Use for Iron Core Ballast

MODIFIED SINE WAVE INVERTERS

Modified Sine

Code	PM-R15A

*Remote control Kit

Code 12V	PM-A-0150AH12	PM-A-0300AH12	PM-A-0600AH12	PM-A-1000AH12	PM-A-1200AH12	PM-A-1500AH12	PM-A-2500AH12
Code 24V	**-**	**-**	**PM-A-0600AH24**	**PM-A-1000AH-24**	**PM-A-1200AH2**	**PM-A-1500AH2**	**PM-A-2500AH24**
Max continuous power	150W	300W	600W	1000W	1200W	1500W	2500W
Peak power	300W	600W	1200W	2000W	1400W	2000W	4200W
Output Amps	0.6A	1.25A	2.5A	4.16A	5A	7A	10.4A
Dimensions	115 x 101 x 63mm	189 x 101 x 63mm	245 x 176 x 85mm	360 x 236 x 83mm	330 x 275 x 110mm	480 x 275 x 110mm	510 x 275 x 110mm
Code 12V with charger				**PM-A-1000CA12**	**PM-A-1200CA12**	**PM-A-1500CA12**	**PM-A-2500CA12**
Code 24V with charger				**PM-A-1000CA24**	**PM-A-1200CA12**	**PM-A-1500CA24**	**PM-A-2500CA24**

Specifications:
- AC Output voltage 230VAC
- Regulations ± 0.5%
- Frequency 50Hz ±1%
- Low voltage shut down 12/ 24 9.8V/ 19.12V

Features:
- Overload protection
- DC Input/ AC Output short circuit protection
- All inverters supplied with cables
- Cooling Fan

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PURE SINE WAVE INVERTERS

Pure Sine

BC1

Code 12V	CZ-150S-12	CZ-300S-12	CZ-600S-12*	CZ-1000S-12*	CZ-2000S-12*	CZ-3000S-12*	CZ-4000S-12*	CZ-5000S-12*	CZ-6000S-12*
Code 24V	-	-	CZ-600S-24*	CZ-1000S-24*	CZ-2000S-24*	CZ-3000S-24*	CZ-4000S-24	CZ-5000S-24*	CZ-6000S-24*
Code 48V	-	-	-	CZ-1000S-48*	CZ-2000S-48*	CZ-3000S-48*	CZ-4000S-48*	CZ-5000S-48*	CZ-6000S-48*
Max continuous power	150W	300W	600W	1000W	2000W	3000W	4000W	5000W	6000W
Peak power	300W	600W	1200W	2000W	4000W	6000W	8000W	10000W	12000W
Output Amps	0.6A	1.5A	2.8A	4.3A	8.7A	13A	17A	21A	26A
Dimensions	180x105x60mm	260x165x85mm	260x165x85mm	328x165x85mm	416x165x85mm	497x170x150mm	485x210x127mm	565x210x145mm	565x210x145mm

*** Add (C) for Charger Unit**

- High Quality Components are used to improve effeciency.
- Automated manufacturing processes ensure product quality.
- Advanced PCB design results in reduced electro magnetic interference and improved performance.

British Plug for Inverters

Code	A304

HOME SOLAR INVERTERS

This home solar inverter system incorporates features such as overload protection, short circuit protection and a DC cold start function.
The inverter is designed for 24 hour operation.

NB: Requires external solar controller

Code	HU-103	HU-203	HU-303	HU-503	HU-603	HU-803
Max.con power	1.2kVA/ 800W	2.4kVA/ 1600W	3.6kVA/ 2400W	5kVA/ 4000W	6kVA/ 6000W	8kVA/ 8000W
Input voltage range	120-270VAC					
Input DC range	12VDC	24VDC	24VDC	48V	48VDC	48VDC
Output voltage	220/ 230/ 240VAC re-settable via LCD Display					
Output current	3.5A	7A	10A	17A	26A	35A
Battery charger	>40A	>50A	>50A	>60A	>60A	>60A
Dimensions	298 x 400 x 150	298 x 450 x 190	298 x 450 x 190	415 x 600 x 260	415 x 600 x 260	415 x 600 x 260

Specifications:

- Pre-settable parameters
- Multi stage charger
- High effeciency design
- Removable LCD Display
- Self-diagnostic function
- Input/ output protection

DC TO AC INVERTER/ CHARGER/ POWER MANAGEMENT SYSTEM

- Combi-functional, with intelligent shore and generator power management
- Uninterrupted AC power (UPS function)
- Virtually unlimited power thanks to parallel operation
- Three-phase capability
- **Power Control**: Dealing with limited generator, shore side or grid power to avoid sudden loads on generator causing voltage spikes
- **Power Support**: Boosting the capacity of shore or generator power, an innovative feature of the CombiPlus
- Four-stage adaptive charger and dual battery charging
- LCD display for parameter setting and error messages
- Programmable auxillary relay (x3)
- Programmable input current limit for power share
- Communication with max. 10sets of solar chargers (SunStar series)
- Four preset control mode applications with AC grid, AC charging and solar charging
- Optional remote panel with LCD display for easy operation at a distance

CombiPlus - Pure Sine Wave Inverter/ Charger/ Power Management System - Ideal for home, office, caravan etc.

Code	DC Voltage (IN)	AC Voltage (IN/OUT)	Rated Power	Max Power	Size (mm)	Battery Voltage	Charging Current	Battery Bank Size
CP-1500-122	12VDC	185-240VAC	1500W	3000W	362 x 258 x 370	12VDC	70A	200-700Ah
CP-3000-122	12VDC	185-240VAC	3000W	6000W	424 x 258 x 370	12VDC	140A	400-1200Ah

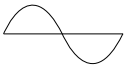
The "CombiPlus" is a powerful true sine wave inverter, a sophisticated battery charger that features adaptive (4-stage) charge technology and a high-speed AC Auto Transfer Switch (ATS) in a single compact enclosure. The "CombiPlus" can also support the Mains Power with battery power when the load increases or the Mains fails. If the load falls, the excess Mains Power is diverted to charge the battery. The unit can also control up to 10 **SS-45C** solar charge controllers to enable solar battery charging. (see page 7)

Due to our policy of continuous improvement we reserve the right of modifying specifications and appearance.

NEW

AC HOME HYBRID SYSTEM

The Solar hybrid system is a PLC controlled solar/ wind modular solution for home and office. Our new modular system can be increased from 3kVA to 15kVA. The base unit consists of a steel 21U 19inch cabinet, touch screen monitor, 100A solar controller and an off grid inverter (3kVA).



Pure Sine

IP20
Linear Load
Efficiency
83 to 87%

Touch Screen Monitor

100A Solar Controller

Stackable Grid Inverter

Complete System

Batteries, PV Panels and PV mounting system to be ordered seperately

*3kVA is a base unit and can be increased with selected modules to 15kVA

Base Unit		Add on inverter modules				
Code	***SWKH001-3KVA**	**SPO1000-B**	**SPO3000-B**	**SPO6000-B**	**SPO9000-B**	**SPO12000-B**
Max power	2100W	700W	2100W	4200W	6300W	8400W
Output voltage	220/ 230/ 240 +/-1%			220/ 230/ 240 +/-1%		
Max current	13.6A	4.5A	13,6	37,3	40,9	54,5
DC Voltage	48 (40-57VDC)			48 (40-57VDC)		
Weight Kgs	88kgs	5	13,5	32	41	49
Dimension	21U x 600D	440 x 286 x 1U	435 x 358 x 2U	435 x 380 x 445	435 x 380 x 445	435 x 380 x 445

Accessories

Code	Description
SPC048200	Solar Charge controller MPPT, 200A, 48VDC, Max PV input 9.6kW (58-70V)
SWKH-41U	41U battery cabinet + DC Bus bar, Fans and extraction, lockable doors

NEW

HOME SOLAR INVERTERS

The Solar Powabank is the latest innovation in power products: Simplified structure, reliable performance, easy operation. This Solar Power System can offer stable and reliable electricity to those regions where are short of power or even without power.

Code	**SPB-AW-55/300**	**SPB-AW-100/600**	**SPB-AW-200/600**	**SPB-AW-200/600-PACK**
Description	300W AC Power Pack	600W AC Power Pack	1000W AC Power Pack	1000W AC Power Pack Only
Max power rating	300W	600W	1000W	1000W
Waveform	Modified Sinewave	Pure Sinewave	Pure Sinewave	Pure Sinewave
Max current	N/A	8A	8A	8A
Controller Amps	10A	30A	30A	30A
Battery	55Ah	100Ah	200Ah	200Ah
Solar Panels*	50W	100W	2 x 100W	-
Output voltage	220V ± 10%			
Input voltage	25V Max			
Dimensions	300 x 180 x 550mm	460 x 240 x 550mm	560 x 290 x 480mm	560 x 290 x 480mm

Features

- Reliable, maintenance free performance
- Simple design, to meet your requirements
- LCD Display clearly shows system status at all times
- Various applications ranging from everyday to emergency power supply
- Power generation and storage for uninterrupted use in places without electricity

* For mounting brackets for the solar panels see page 29-31

Due to our policy of continuous improvement we reserve the right of modifying specifications and appearance.

NEW

GRID TIE HOME SOLAR SETS

Solar Frontier home based grid tie solar systems are designed with precisely matching components for maximum output and efficiency using the latest CIS thin film technology solar panels and highly efficient Solar Frontier inverters. Grid tie solar systems are designed with the aim of working in conjunction with your utility supply to offset your usage from the utility by making use of solar power before utility power and feeding excess power back into your local grid.

Code	Capacity	No. of Inverters	No. of Modules	DC Cable	Connectors	Modules in Series	Dialy Power Generated (±)	Roof Required
SOLARSET 3.0	3.0kWp	1 x 3kW	18	50m	5 male 5 female	6	14kWh	23.4m²
SOLARSET 4.6	4.6kWp	2 x 3kW	28	50m	10 male 10 female	7	21.5kWh	36.4m²
SOLARSET 5.9	5.9kWp	2 x 3kW	36	50m	10 male 10 female	6	25.7kWh	46.8m²

- Estimated daily power generated is calculated at STC and may vary depending on weather conditions.
- Mounting brackets not included.
- Compatible electricity meter required. South African prepaid meters are not compatible

INVERTER SPECIFICATIONS

DC Input sive (PV panel side)	
Maximum input volatge	900V
Minimum input voltage	350V
MPP Range	350V - 700V
Maximum input current	10A
Maximum input power	3060W
AC Output side (Mains grid Connection)	
Rated output voltage	230V
Maximum Output current	16A
Rated output	3000W
Rated frequency	50Hz & 60Hz
Own Consumption	<8W
Feeding Phases	single phase
Power Factor (cos = 1)	0.95 capacitive … 0.95 inductive
Maximum Efficiency	98,60%T
Safety	
Protection Class	II
Degree of protetion	IP21 (Casing IP51; Display IP21)
Isolation Principle	No galvanic isolation; transformerless
Grid Monitoring	Yes. Intergrated
Insulation Monitoring	Yes, intergrated
Residual current monitoring	Yes, intergrated
Overvoltage protection	Varistors
Reverse Pololarity protection	Yes

Code	FS-WR-3000

Inverter

Features

- Highest efficiency
- Simple installation
- Intergrated data logger
- Firmware update possible
- Low housing temperature at full load
- Functionally perfect, environmentally friendly plastic housing
- Lowest possible own consumption
- Intergrated DC circuit breaker
- Protective insulation according to protection class II
- Very long service life
- Service menu for parameter adjustment
- Multifunction graphical LCD display with backlighting
- Animated representation of yield operation
- Simple menu-driven operation
- System monitoring with Solar-log™ and web'log

Monitoring - If the system owner agrees to allow his system data to be published on *www.solare-energiewende.de*, he will be able to use the Solar Frontier Monitoring Portal free of charge for two years. At the end of that time, he will receive an offer to continue using the portal as a paid service.

Clear Display of Yield Values - The software interface is organized for maximum clarity. Besides the system data, the energy yields are shown in a daily, weekly, monthly or yearly profile. Current yield values for the system are evaluated on a scale and compared with values from other systems in the same region. So users can see at a glance whether their yields are higher or lower than the average for the region. They can also see their environmental contribution very easily in a display that shows how much CO_2 has already been reduced because of these yields.

Due to our policy of continuous improvement we reserve the right of modifying specifications and appearance.

NEW

SOLAR EDGE INVERTERS

This range of solar inverters is part of SolarEdge's innovative system designed to provide superior performance at a competitive price. The solar edge PV inverter combines a sophisticated, cutting edge digital control technology and a one stage, ultra-effecient power conversion architecture to achieve superior performance - over 97% efficieny with best in class reliability. Our fixed-voltage technology ensures the inverter is always working at its optimal input voltage, regardless of the number of modules or environmental conditions.

The best choice for SolarEdge enabled systems

- Superior effeciency (98%)
- Small, lightest in its class and easy to install
- Built-in module-level monitoring
- Communication to internet via ethernet or wireless
- **IP65** - Outdoor and indoor installation

Free 12 year warranty for inverters

Must be used with Solar Edge Power Optimizers (PG13)

Single Phase

Three Phase

Single Phase Inverters

Code	SE2200	SE3000	SE3500	SE4000	SE5000	SE6000	SE4000-16A	RATING
Rated AC Power Output	2200	3000	3500	4000	5000	6000	4000	W
AC Output Voltage (Nominal)	220/230							Vac
AC Output Voltage Range	184-264.5							Vac
AC Frequency	50/60+/-5%							Hz
Max Current Output	12	16.5	19.5	22	27	27	16	A
Residual Current/ Step Detector	300/30							mA
Utility monitoring, islanding protection, Country confiqurable thresholds	Yes							-
Recommended Max DC Power (module STC)	2400	3300	3900	4400	5500	6600	4400	W
Transformer-less, ungrounded	Yes							-
Max Input Voltage	500							Vdc
Nominal DC Input Voltage	350							Vdc
Max Input Current PV	8.5	11.5	13.5	15.5	19.5	23	15.5	A
Support Communication Interface	RS485, RS232, ETHERNET, Zigbee (Optional)							-

Three Phase Inverters

Code	SE7K	SE8K	SE9K	SE10K	SE12.5K	SE15K	SE16K	SE17K	RATING
Rated AC Power Output (Max)	7000	8000	9000	10000	12500	15000	16000	17000	W
AC Output Voltage (Nominal)	380/ 220: 400/ 230								VAC
AC Output Voltage Range	184-264.5								VAC
Max Current Output	11.5	13	14,5	16	20	23	25.5	26	A
Grids supported - three phase	3/ N/ PE: 230/ 400								-
Residual current/ step detector	300/ 30								mA
Utility monitoring, islanding protection, country configurable threshold	Yes								-
Recommended max DC power (module STC)	7700	8800	9900	11000	13700	16500	17600	18700	W
Transformer-less, ungrounded	Yes								-
Max input voltage	950								VDC
Nominal DC input voltage	750								VDC
Max input current PV	12	13,5	15	16,5	21	22	23	23	A
Support communication interface	RS485, RS232, ETHERNET, ZIGBEE or GSM (Optional see page14)								-

Code*	Description
WE-1M-25	Extended warranty, single phase inverter 4 - 6kW
WE-1S-25	Extended Warranty, single phase inverter <4kW
WE-3H-25	Extended warranty, three phase inverter 15 - 17kW
WE-3M-25	Extended warranty, three phase inverter 7 - 12.5kW

Safety Standard compliance IEC-62103 (EN50178), IEC-62109

Emissions IEC61000-6-2, IEC61000-6-3

Grid connection standards: VDE 0126-1-1, VDE-AR-N-4105, AS-4777, RD-1663, IEC61000-3-11, IEC61000-3-12, FCC part 15 class B, RoHS Yes

SOL

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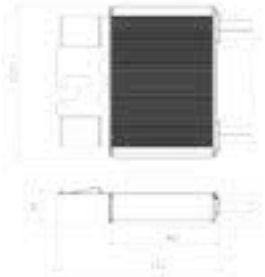
POWER OPTIMIZER

A superior approach to maximizing the throughput of photovoltaic systems

- Up to 25% more energy - module-level MPPT eliminates power loss due to module mismatch
- Superior effeciency- peak (99.5%), weighted (98.9%)
- Next gereration maintenance with module-level monitoring and smart alerts
- Automatic DC safety
- Maximum roof utilization
- Independant optimization technology (IndOPTM)

The most cost effective solution for residential, commercial and large field installations

Only for use with Solar Edge Inverters

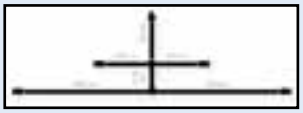


Code	OPA250-RV	OPA300-LV	OPA400-MV	OPA400-EV	RATING
Rated Input DC Power	250	300	400	400	W
Absolute max input voltage	47	55	75	130	VDC
MPPT Operating range	5-47	5-55	5-75	15-130	VDC
Max input current	10	10	12.5	7	A
Max Output current	15				A
Operating Output Voltage	5-60				VDC
Total max string voltage 1ph/ 3ph	500/ 950				VDC
Min number Optimizers	8 (1Ph system)/ 16 (3Ph system)				-
Max number Optimizers	Module power dependant: Maximum 25 (1Ph system)/ 50 (3Ph system)				-

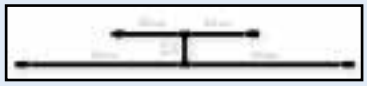
BRANCH-CABLE FOR POWER OPTIMIZER INPUT

Ideal solution for low power modules

- Allows to connect 2-4 modules in parallel to a single power optimizer
- Double insulated PV wire
- Max current 30A @ 1000VDC
- Utilize power optimizers to their full power rating
- Multi-contact MC4 connectors

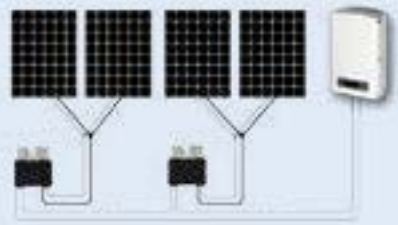


SE-CBY-4MM



SE-CBY-3MM

SE-CBY-2MM



Code	SE-CBY-2MM	SE-CBY-3MM	SE-CBY-4MM
Description	2- Module branch cable	3- Module branch cable	4- Module branch cable
Kit consists of	20 male & 20 female units in each pack	10 male & 10 female units in each pack	10 male & 10 female units in each pack

SAFETY & MONITORING INTERFACE

Benefit from module-level monitoring and automatic safety with non-SolarEdge inverters.

- Interface between SolarEdge power optimizers and non-SolarEdge inverters
- Module safety voltage for installer and firefighter safety
- Mobile and web-based module level performance monitoring
- Communication via RS232, RS485 or Ethernet
- IP65 for outdoor installation

The SolarEdge safety and monitoring interface collects module performance data measured by each power optimizer, as well as inverter data*, and interfaces with the SolarEdge server to allow module-level and system-wide monitoring. *(For communication options please see page 14)*

Code	SMI-35-3C-01
DC Input	
Max input voltage	1000VDC
Total max current	35A
Input type	3 x MC4 Compatible
AC Input	
Supported voltage	85 - 264VAC
AC Frequency	47 - 62Hz
Max input current	300mA

Additional Features	
Display	LCD & LED
Remote monitoring	Yes
Module Safety DC Voltage	Yes
On-site Master shutdown	Yes
Lighting Protection	Yes
Read inverter data	Yes
DC Current Sense	Yes

Due to our policy of continuous improvement we reserve the right of modifying specifications and appearance.

SOL

CONTROL AND COMMUNICATION GATEWAY

Highlights:

- Analogue inputs accomodate a variety of environmental sensors, including temperature, irradiance and wind
- Logs inverter monitoring data
- Power reduction interface - ripple control
- Extends the distance of wired connections
- Wireless connectivity - GSM or Zigbee wireless connection options (see below)
- Interfaces to non-SolarEdge monitoring loggers
- Revenue meter connection

Application Examples:

Code	SE1000-CCG-G		
Power supply	Included, 100-240VAC	Number of analogue inputs	3
Supply voltage	9 - 140VDC (2W)	Input 1	0-2V or 0-10V
Ethernet interface	10 / 100 - BaseT	Input 2	0-20mV or 0-2V
Wireless connection	ZigBee Module (see below)	Input 3	-20mA - 20mA
Power Reduction INT.	4 control pins, 5V, GND	Supported RS485 Devices: SolarEdge devices, export inverter data, Revenue meter,	
RS232 interface	For local connection	Exported Data to Non-SolarEdge Logger	

GSM MODEM

SolarEdge offers a GSM/ GPRS modem for wireless connectivity. The modem enables a wireless link between a master inverter and the SolarEdge monitoring server using GSM cellular communication. GSM connectivity allows to effortlessly connect remote installations to the monitoring portal.

Effortless Monitoring

- Connects wirelessly to the monitoring portal
- Easy installation, connects to serial port of master inverter or communication gateway
- European compliance
- Uses any available GSM network
- External antenna for strong reception

Code	SE1000-GSEG-20E	Rating
RF Data rate	14,4	kbps
Frequency bands	850/ 900/ 1800/ 1900	Mhz
Transmit power	30 (@ 1800/ 1900Mhz)/ 33 (@850/ 900Mhz)	W
Data volume	0.13 (Per power optimizer)/ 0.25 (per inverter)	MB/ Month
Antenna	external, 0dbi, SMA/M connector	-
Power supply	5.5 - 32	VDC

WIRELESS COMMUNICATION PRODUCTS

SolarEdge offers Zigbee products for wireless connectivity. These enable either a wireless mesh network between multiple inverters at a site, or wireless link between a single inverter and a remote internet gateway point.

Interconnect with ease

- Replaces either RS485 or Ethernet wiring
- External antennas for long or non-line-of-sight-links
- Interconnects inverters wirelessly
- Connects wirelessly between an inverter and a remote internet gateway
- Zigbee unit installed within the inverter enclosure for outdoor resilience

Code	Description	Functions
SE1000-ZB02-MST	1 Digi X-bee-Pro coordinator module, antenna (Master inverter)	Inter-inverter communication
SE1000-ZB02-SLV	1 Digi X-bee-Pro coordinator module, antenna (Slave inverter)	Inter-inverter communication
SE1000-ZB00-DG2-X	1 Digi Connect Port x2 gateway, 1 Digi X-bee-Pro router module, antenna	Ethernet Gateway
Performance	**Description**	**Rating**
RF Data Rate	250	kbps
Indoor/ Urban rating	15	m
Outdoor/ RF Line of Sight	250	m
Frequency Band	2.4	Ghz
Antenna	2.11" helical whip, RP-SMA connector	-
Port (**SE1000-2B00-DG2-X**)	RJ45, 10/ 100Ethernet	-
Power Supply	9-30	VDC

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NEW

SINGLE PHASE GRID TIE INVERTERS

The Fronius IG Plus generation of inverters represents an evolution of the proven Fronius IG product family. Power categories from 2.6 to 12kW promise suitability for every possible system size. With a maximum effeciency of 95.9%, the Fronius IG Plus range achieves one of the highest values for transformer inverters.

Fronius inverters always achieve maximum yield, even when in the partial-load range. This is all down to the unique Fronius Master Inverter X-Change system (MIX™). The "master" is allocated alternately, taking into account the operating hours worked.

Fronius transformer inverters use a high-frequency (HF) transformer. The automatic transformer switchover facility produces three efficiency peaks. The result: a constant level of efficiency across the entire input voltage range, resulting in higher yields.

With the Fronius Datamanager, we offer a WLAN interface in the inverter itself. The inverter is connected to the internet without additional cabling and grants you the perfect overview of how the PV system is operating. (Optional)

Fronius inverters are ready for the Smart Grid of tommorrow. A series of smart functions, known as Advanced Grid Features, are built into the devices.

Code	FIGP25V-1	FIGP30V-1	FIGP35V-1	FIGP50V-1	FIGP55V-1	FIGP60V-1
Input Data	**25V-1**	**30V-1**	**35V-1**	**50V-1**	**55V-1**	**60V-1**
DC maximum power at cos Ø=1	2740W	3170W	3710W	4260W	5260W	6320W
Max. input current (I_{dc} max)	11.9A	13.8A	16.2A	18.6A	22.9A	27.5A
Max array short circuit current	17.9A	20.7A	24.3A	27.9A	34.4A	41.3A
Min. input voltage (U_{dc} min)	230V					
Feed-in start voltage (U_{dc} start)	260V					
Nominal input voltage (U_{dc} max)	370V					
Max input voltage ($U_{dc,1}$)	600V					
MPP voltage range ($U_{mpp\ min}$ - $U_{mpp\ max}$)	230 - 500V					
Number of DC inputs	6					

Output Data	25V-1	30V-1	35V-1	50V-1	55V-1	60V-1
AC nominal output ($P_{ac,r}$)	2600W	3000W	3500W	4000W	5000W	6000W
Max. output power	2600VA	3000VA	3500VA	4000VA	5000VA	6000VA
Max. output current (I_{ac} max)	11.3A	13.0A	15.2A	17.4A	21.7A	26.1A
Grid connection ($U_{ac,r}$)	1-NPE 230V					
Min. output voltage ($U_{ac\ min}$)	180V					
Max. output voltage ($U_{ac\ max}$)	270V					
Frequency (f_r)	50Hz/ 60Hz					
Frequency range (f_{min} - f_{max})	46 - 65Hz					
Distortion factor	<3%					
Power factor (cos $Ø_{ac,r}$)	0.75 - 1ind / cap					

General Data	25V-1	30V-1	35V-1	50V-1	55V-1	60V-1
Dimensions (height x width x depth)	673 x 434 x 250mm				968 x 434 x 250mm	
Weight	23.8kg				36.9kg	
Degree of protection	IP54					
Protection class	1					
Overvoltage category (DC/ AC)	2 / 3					
Night time consumption	ca. 1W					
Inverter type	High Frequency Trasnformer					
Cooling	Regulated air cooling					
Installation	Indoor & outdoor installation					
Ambient temperature range	from 20°C to +55°C					
Permitted humidity	0% to 95%					
DC connection technology	Screw terminal connection 1.5mm² - 16mm²					
AC connection technology	Screw terminal connection 2.5mm² - 35mm²					

Due to our policy of continuous improvement we reserve the right of modifying specifications and appearance.

SOL

NEW

THREE PHASE GRID TIE INVERTERS

The Fronius IG Plus generation of inverters represents an evolution of the proven Fronius IG product family. Power categories from 2.6 to 12kW promise suitability for every possible system size. With a maximum effeciency of 95.9%, the Fronius IG Plus range achieves one of the highest values for transformer inverters.

Fronius inverters always achieve maximum yield, even when in the partial-load range. This is all down to the unique Fronius Master Inverter X-Change system (MIX™). The "master" is allocated alternately, taking into account the operating hours worked.

Fronius transformer inverters use a high-frequency (HF) transformer. The automatic transformer switchover facility produces three efficiency peaks. The result: a constant level of efficiency across the entire input voltage range, resulting in higher yields.

With the Fronius Datamanager, we offer a WLAN interface in the inverter itself. The inverter is connected to the internet without additional cabling and grants you the perfect overview of how the PV system is operating. (Optional)

Fronius inverters are ready for the Smart Grid of tommorrow. A series of smart functions, known as Advanced Grid Features, are built into the devices.

Code	FIGP55V-3	FIGP60V-3	FIGP80V-3	FIGP100V-3	FIGP120V-3	FIGP150V-3
Input Data	**55V-3**	**60V-3**	**80V-3**	**100V-3**	**120V-3**	**150V-3**
DC maximum power at cos Ø=1	5250W	6300W	7360W	8430W	10590W	12770W
Max. input current (I_{dc} max)	22.8A	27.5A	32.0A	36.7A	46.2A	55.6A
Max array short circuit current	34.2A	41.3A	48.0A	55.1A	69.3A	83.4A
Min. input voltage (U_{dc} min)	230V					
Feed-in start voltage (U_{dc} start)	260V					
Nominal input voltage (U_{dc} max)	370V					
Max input voltage ($U_{dc,1}$)	600V					
MPP voltage range ($U_{mpp\ min}$ - $U_{mpp\ max}$)	230 - 500V					
Number of DC inputs	6					

Output Data	55V-3	60V-3	80V-3	100V-3	120V-3	150V-3
AC nominal output ($P_{ac,r}$)	5000W	6000W	7000W	8000W	10000W	12000W
Max. output power	5000VA	6000VA	7000VA	8000VA	10000VA	12000VA
Max. output current ($I_{ac\ max}$)	7.3A	8.7A	10.2A	11.6A	14.5A	17.4A
Grid connection ($U_{ac,r}$)	3-NPE 400V/ 230V					
Min. output voltage ($U_{ac\ min}$)	180V					
Max. output voltage ($U_{ac\ max}$)	270V					
Frequency (f_r)	50Hz/ 60Hz					
Frequency range (f_{min} - f_{max})	46 - 65Hz					
Distortion factor	<3%					
Power factor ($cosØ_{ac,r}$)	0.75 - 1ind./ cap					

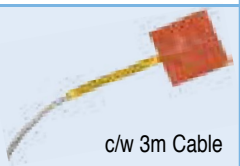
General Data	55V-3	60V-3	80V-3	100V-3	120V-3	150V-3
Dimensions (height x width x depth)	1.263 x 434 x 250mm					
Weight	49.2kg					
Degree of protection	IP54					
Protection class	1					
Overvoltage category (DC/ AC)	2/ 3					
Night time consumption	ca. 1W					
Inverter type	High Frequency Transformer					
Cooling	Regulated air cooling					
Installation	Indoor & outdoor installation					
Ambient temperature range	from 20°C to +55°C					
Permitted humidity	0% to 95%					
DC connection technology	Screw terminal connection 1.5mm² - 16mm²					
AC connection technology	Screw terminal connection 2.5mm² - 35mm²					

Due to our policy of continuous improvement we reserve the right of modifying specifications and appearance.

NEW

FRONIUS ACCESSORIES

	Datalogger Web	Datamanager Card	Com Card	Power Control Box
Code	**FRONIUS-DW**	**FRONIUS-DM**	**FRONIUS-CC**	**FRONIUS-PCBOX**
Supply Voltage	12VDC	230VAC (+10%/ -15%)	230VAC (+10%/ -15%)	12VDC
Power usage	1.43W	2.2W	60mA	1.3W
Interfaces	RS422 / Ethernet / USB Relay: 6A@30VDC / 6A@42VAC	RS422 / Ethernet / WLAN, 6 Digital Inpus, 4 Digital Inputs/Outputs (Ripple Control Interface)	RS422 (RJ45) x2 (In/Out)	RS422 (RJ45) x2 (In/Out) 2,3 & 4-Stage ripple-control signal receivers
Dimensions	190 x 114 x 53mm	132 x 103 x 22mm	140 x 100 x 28mm	197 x 110 x 57mm
Information	Datalogging for up to 4096 days. This enables you to get system information for up to 100 inverters in real-time. Inverters must be equipped with com card.	Datalogging for up to 4096 days. Enables inverters to be connected directly to the internet for remote monitoring & control. Integrated web server. Only 1 inverter in 100 needs to be fitted with this card. Other inverters must be equipped with com card.	Com card is a network card that each inverter requires for data communication.	Remote-controlled power reduction of PV systems >100kW. Inverters must be equipped with com card and one datalogger is required per system.

	Sensor Box	Irradiation Sensor	Module Temperature	Wind Speed Sensor	Ambient Temperature
		 c/w 3m Cable	 c/w 3m Cable	 c/w 3m Cable	
Code	**FRONIUS-SBOX**	**FRONIUS-IS**	**FRONIUS-MT**	**FRONIUS-WS**	**FRONIUS-AT**
Supply Voltage	12VDC	-	-	-	-
Power usage	1.3W	-	-	-	-
Interfaces	-	Mono Crystalline Si-Sensor ± 70mV@100W/m²	PT1000 -20°C to +150°C	Cup Anemometer Pulse Output 18.79Hz = 1m/s	PT1000 -40°C to +180°C
Dimensions	197 x 110 x 57mm	110 x 40 x 40mm	50 x 100mm	85 x 93 x 115mm	Ø 6 x 50mm
Information	Measurement of additional data by connecting various sensors.	This sensor is for measuring the irradiated energy.	Sensor on adhesive film for module temperature measurement.	The sensor measures the exact speed of the wind.	Sensor for measuring indoor & outdoor temperature.

NEW

PURE SINE WAVE INVERTERS

Phoenix range of inverters are suitable for the widest range of applications. The design criteria have been to produced a true sine wave inverter with optimized efficiency but without compromise in performance. Employing hybrid HF technology, the result is a top quality product with compact dimensions, light in weight and capable of supplying power, problem-free to any load. A unique feature is very high start up power.

Phoenix Inverters victron energy						
Code 12V	**GX-12/180**	**GX-12/350**	**GX-12/800**	**GX-12/1200**	**GX-12/3000**	**-**
Code 24V	**GX-24/180**	**GX-24/350**	**GX-24/800**	**GX-24/1200**	**GX-24/3000**	**GX-24/5000**
Code 48V	**-**	**GX-48/350**	**GX-48/800**	**GX-48/1200**	**GX-48/3000**	**GX-48/5000**
Max. con Power (25°C)	180VA/175W	350VA/300W	800VA/700W	1200VA/1000W	3000VA/2500W	5000VA/4500W
Peak power (W)	350	700	1600	2400	6000	10000
Input DC range	10.5 - 15.5VDC / 21 - 31VDC / 42 - 62VDC		9.2 - 17.3VDC / 18.4 - 34VDC / 36.8 - 68VDC			
Output voltage	230VAC +/- 3% 50Hz or 60Hz +/- 0,1%					
No. Load Consumption	2.6W / 3.8W	3.1W / 5W / 6W	6W / 5W / 4W	6W / 5W / 6W	15W / 15W / 16W	25W / 25W
Battery connection	Screw terminals				2+2 M8 Bolts	
Dimensions	72x132x200mm	72x155x237mm	108x165x305mm	108x165x305mm	362x258x218mm	444x328x240mm

Features
- Extra start-up power
- Low Battery Protection
- Self diagnostic function
- LED fault diagnosis
- Remote on/off switch
- Input/output protection
- 3000/5000VA models allow for parallel or three-phase operation

Due to our policy of continuous improvement we reserve the right of modifying specifications and appearance.

SOL

NEW

SOLAR CHARGE CONTROLLER

The BlueSolar range includes both MPPT & PWM type charge controllers. Ultra fast maximum power point tracking (MPPT) will improve energy harvest by up to 30% compared to PWM charge controllers. Pulse width modulation (PWM) charge controllers offer lower cost solutions with 3-stage battery charging and comprehensive protection.

Code	BLUESOLAR-5	BLUESOLAR-10	BLUESOLAR-20	BS-MPPT-75/15	BS-MPPT-100/15	BS-MPPT-75/50	BS-MPPT-150/70
Rated charge current	5A	10A	20A	15A	15A	50A	70A
Max. load current	10A	10A	20A	15A	15A	50A	70A
Battery Voltage	12/24V (Auto)	12/24V (Auto)	12/24V (Auto)	12/24V (Auto)	12/24V (Auto)	12/24V (Auto)	12/24/36/48V (Auto)
Control method	PWM	PWM	PWM	MPPT	MPPT	MPPT	MPPT
Max. solar voltage	28/55VDC	28/55VDC	28/55VDC	75VDC	100VDC	75VDC	150VDC
Dimensions	70 x 133 x 34mm	70 x 133 x 34mm	76 x153 x 37mm	100 x 113 x 40mm	100 x 113 x 47mm	130 x 186 x 70mm	350 x 160 x 135mm

PRECISION BATTERY MONITORING

The essential function of a battery monitor is to calculate ampere-hours consumed and the state of the charge of a battery. Ampere-hours consumed is calculated by integrating the current flowing in or out of the battery. Victron Battery Monitors are based on a powerful micro-processors programmed with algorithms for precision monitoring.

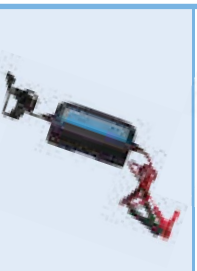
For 2 Batteries

For 2 Batteries
or Temperature
or Midpoint Monitoring

Code	BMV600S	BMV602S	BMV700	BMV702
Input voltage	9.5-90VDC	9.5-90VDC	6.5-95VDC	6.5-95VDC
Current drawn	<4mA	<4mA	<4mA	<4mA
Battery capacity	20-9999AH	20-9999AH	20-9999AH	20-9999AH
Comm port	Yes	Yes	Yes	Yes
Potential free contacts	60V/1A/(N/O)	60V/1A/(N/O)	60V/1A/(N/O)	60V/1A/(N/O)
Dimensions	69 x 69mm	69 x 69mm	69 x 69mm	69 x 69mm

PRECISION WATERPROOF BATTERY CHARGERS IP65

Ultra high efficiency battery chargers. Multiple charging modes for different applications and battery types. Multistage charging. Battery life extending technology.



Code	BPC-12/4	BPC-12/7	BPC-12/10	BPC-12/15	BPC-24/5	BPC-24/8
Supply voltage	200 - 265VAC	180 - 265VAC	180 - 265VAC	180 - 265VAC	180 - 265VAC	180 - 265VAC
Charging current	4A/0.8A	7A	10A	15A	5A	8A
Min. Battery	-	24Ah	30Ah	45Ah	16Ah	24Ah
Dimensions	42 x 61 x 185mm	47 x 95 x 190mm	60 x 105 x 190mm	60 x 105 x 190mm	47 x 95 x 190mm	60 x 105 x 190mm

Due to our policy of continuous improvement we reserve the right of modifying specifications and appearance.

PV JUNCTION BOXES

Generator disconnection boxes are enclosures where PV arrays are electrically connected and where the isolation functon is performed in order to permit maintenance work to be done. Junction boxes are supplied complete with fuse, surge and overload protection.

According to standards

- IEC 60634-7-712
- IEC 60943-7-3
- EN 61439-1-2
- IEC61643-11

NB: GRP= Glass reinforced Polyester

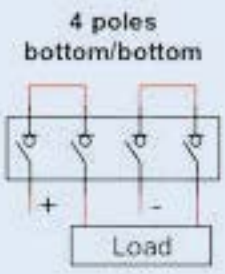
Code	Strings	Voltage	Isc	Surge Protection	IP Rating	Material	Size (mm)	Gland Size
ST039025P	3	1000 VDC	25A	**PST31PV**	**IP65**	ABS/PC	225 x 305 x 130	M12/M16
ST049025P	4	1000 VDC	25A	**PST31PV**	**IP55**	GRP	285 x 380 x 185	M12/M16
ST068060P	6	800 VDC	63A	**PST31PV**	**IP55**	GRP	285 x 570 x 185	M12/M16
ST148012P	14	800 VDC	125A	**PST31PV**	**IP55**	GRP	380 x 760 x 225	M12/M16
SH161012	16	1200 VDC	160A	**PST31PV**	**IP55**	GRP	760 x 380 x 225	M12/M16

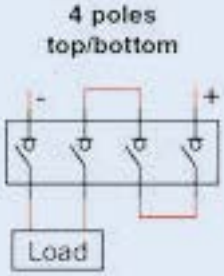
HIGH RATING DC SWITCH DISCONNECTORS

Series 55DC/ 55PV switch-disconnectors are manually operated load break switches that provide safety isolation for any low voltage circuit in photovoltaic applications.

According to standards

- IEC 60947-3
- IEC 60364-7-712
- EN 60947-3
- DIN VDE 0126
- VDE 0660-107 (1992)
- IEC 60364-4-410 9





General Characteristics

- Visual indication of contact position
- High thermal and dynamic withstand
- Operational load duty categories DC-21 and DC-22

Series bridges to be ordered seperately

Protection to ensure the safety against electrical shocks

Code	220VDC	400VDC	600VDC	800VDC	1000V
55DC4014	125ADC	125ADC	80ADC	63ADC	-
55DC4026	250ADC	250ADC	125ADC	125ADC	-
55PV4012	-	-	-	-	125ADC
55PV4016	-	-	-	-	160ADC

Technical	55DC4014	55DC4026	55PV4012	55PV4016
Rated insulation voltage Ui	1000VDC	1000VDC	1000VDC	1200VDC
Rated impulse withstand voltage Uimp	8kV	8kV	12kV	12kV

Accessories

For specific types | **For all types**

Lockable

Lockable

Set of 2

Type	Internal Handle	External Handle + Shaft	Series Bridge	Terminal screen	Shaft Extender	Auxilliary contacts	Inter phase barrier
55DC4014	**26995042**	**55K1G200**	**41DC4014**	**26984012**	**14001020 (200m)**	**26990031 (1NO/1NC)**	**-**
55DC4026	**26995052**	**55K1G200**	**41DC4026**	**26984020**	**14001025 (250m)**	**26990032 (2NO/2NC)**	**-**
55PV	**26995052**	**55K1G200**	**26092025**	**26984020**	**14001032 (320m)**	**-**	**29980024**
					14001050 (500m)		

Due to our policy of continuous improvement we reserve the right of modifying specifications and appearance.

Gewe

NEW

DC SWITCH DISCONNECTORS

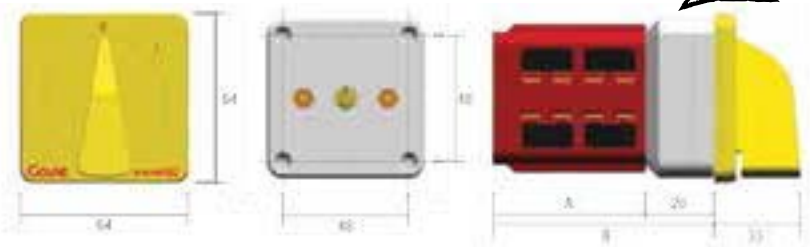
Manually operated multiple load break switches that ensure safe on-load opening and closing of photovoltiac circuits on small and medium systems.

- Double breaking mechanism
- Contacts in series to optimize electrical characteristics
- External series links mounted in factory
- Silver alloy contacts

IP20 - Finger safe

Series links mounted in factory

Code	Voltage	A-5342PVO	A-5362PVO	A-5382PVO	A-5102PVO
Connecting Screw	-	M5	M5	M5	M5
Standard wire (mm^2)	-	10-25	10-25	10-25	10-25
Flexible (mm^2)	-	10-16	10-16	10-16	10-16
Impulse Voltage Uimp kV	-	4	4	4	4
Current ratings @ load duty category DC - 21					
	300VDC	35ADC	-	-	-
	400VDC	-	25ADC	-	-
	500VDC	-	20ADC	-	-
	600VDC	-	15ADC	25ADC	-
	800VDC	-	-	10ADC	-
	1000VDC	-		-	25ADC



Double breaking mechanism avoids arching due to high speed closing or opening, independant of operator turning speed and pressure.

Accessories

Code	AK1200523	AK0100007	AK0000003	AK1740003
Description	Padlockable operating handle	DIN Rail mounting Plate	Base mounting plate	DIN Rail mounting kit with extension shaft and door interlock.

PV COMPACT ENCLOSED ISOLATORS IP65

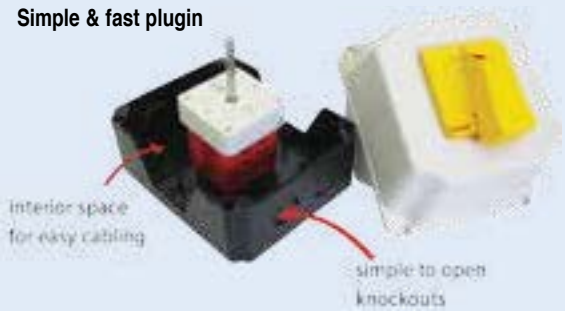
The IS-PV Series has been designed in order to offer optimum performance with enclosed switch disconnectors that use standard MC4 connectors, creating extremely easy to install and connect solutions.

General Characteristics

- Original and compact design
- Base mounting
- Enclosure UV resistant
- Auxiliary contacts option

Padlockable Handle Available

Simple & fast plugin



Code	A-5342MC7	A-5362MC7	A-5382MC7	A-5102MC7
Description	PV switch isolator 35A @ 300VDC (MC4 included)	PV switch isolator 25A @ 400VDC/ 20A @ 500VDC (MC4 included)	PV switch isolator 25A @ 600VDC/ 16A @ 800VDC (MC4 included)	PV switch isolator 25A @ 1000VDC (MC4 included)

Due to our policy of continuous improvement we reserve the right of modifying specifications and appearance.

LIGHTING & SURGE PROTECTION

Special Surge Protection for Invertors (e.g. Wind Turbines)

Code	Class	No. of Poles	Max. Discharge 8/20µS	Up	Uc	Backup MCB	Network	DIN Width
SLP-880V/3	2	3	40kA	<3.2kV	880V	160A	TN-S/TN-C/TT	3

Photovoltaic System Protection

Code	No of Poles	Max Discharge 8/20µS	Nominal Discharge 8/20µS	Up	Uc	Uoc stc	DIN Width
SLP-170PHV/2	2	40kA	15kA	0.8kV	170VDC	250VDC	2
SLP-500PHV/2	2	40kA	20kA	4.0kV	500VDC	750VDC	2
SLP-700PHV/3	3	40kA	20kA	3.6kV	350VDC	750VDC	3
SLP-1000PHV/3	3	30kA	15kA	4kV	500VDC	1000VDC	3

Uoc stc refers to the maximum voltage of the photovoltaic panel

NEW

GPV SURGE PROTECTION

Photovoltaic System Protection

Code	Class	No of Poles	Imax 8/20	In 80/20	Iimp 10/350	Up	Uc	DIN Width	Auxilliary
PST25PV	2	2	40kA	20kA	-	2.2kV	550VDC	2	N
PST31PV	2	3	40kA	20kA	-	3.0kV	1000VDC	3	N
PST41PV	1+2	2	-	40kA	12.5kA	1.9kV	1000VDC	3	Y

PST25/31: Surge protection devices Class II are developed to protect PV Photovoltiac networks against atmospheric lightning. These units must be installed in parallel on the DC networks to provide common and differential mode protection. The design is based on high energy MOVs equipped with specific thermal disconnectors and related failure indicators.

PST41: Surge protector devices Class I are recommended for both ends of the DC power supply line. Due to their extraodinarily high discharge capacity, they are recommended for use on installations with elevated risk of direct lightning strikes. The protection is based on high energy MOVs and specific thermal disconnectors achieving a superior protection level and a lack of follow-up current.

NEW

GPV FUSE PROTECTION

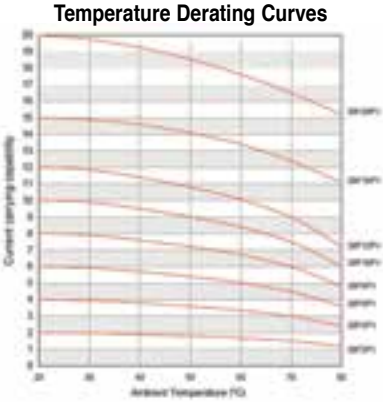
A range of fuse links in a 10 x 38mm packaging specifically designed for protection and isolation of photovoltiac strings.
The fuse links are capable of interrupting low overcurrents associated with faulted PV string arrays.

General Characteristics

- Rated Voltage: 1000Vdc
- Time constant (L/R): under 1ms
- Rated breaking capacity: 33kA (VDC)
- Minimum interrupting rating 1.3 x In

Code	Current Rating	Power Loss	
		0.8In	In
30F6PV	6A	1.1W	1.8W
30F8PV	8A	1.2W	2.1W
30F10PV	10A	1.3W	2.3W
30F12PV	12A	1.5W	2.7W
30F15PV	15A	1.7W	2.9W
30F20PV	20A	2.1W	3.6W

Temperature Derating Curves



NEW

DC FUSEHOLDERS

10x38 Fuse Holders for DC Applications

Code	Thermal Rating	Fuse Size	Poles	DIN Modules
211PV	32A	10 x 38	1 pole	1

Accessories

Code	Description
21KE	Multipole assembly kits

According To
- IEC 60947-1
- IEC 60947-3

Characteristics
- 1000VDC - DC-20B
- Mounting 35mm DIN rail
- Hight temperature resistant plastics
- Elevated insulation characteristics

For multipole fuse holders use multipole assembly kits - **21KE**

Due to our policy of continuous improvement we reserve the right of modifying specifications and appearance.

PV JUNCTION BOXES

Make your solar installation more cost effective by reducing the wiring, improve reliability and reduce maintenance.

Characteristics:

- Equipped with PV dedicated surge arrestor
- With function or arrestor failure alarm
- Adaptable to various communication modules: **RS-485**.
- Wireless communication available ex-indent.

Code	PVJ-BOX16
PV Array input voltage	<1000V
PV Array Input string no.	16
Maximum current of each string	10A
Protection level	IP65
Ambient temperature	-25°~+55°C
Relative humidity	<95%
Communication mode	RS-485, RS-232

Note: Includes DIN mount 24VDC 1.25A Power Supply

SOLAR MODULE ANALYSER

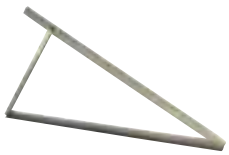
Code	PROVA200	PROVA300XP
Description	Analyser	Printer

- Voltage range: 0-60VDC
- Current range: 0-6A
- I-V Curve test for solar cell
- Maximum solar power (Pmax) search by Auto-scan (60V, 6A)
- Maximum voltage (Vmaxp) at Pmax
- Maximum current (Imaxp) at Pmax
- Voltage at open circuit (Vopen)
- Current at short circuit
- Calculation of efficiency (%)
- Manual single point test

SOLAR PANEL MOUNTING SYSTEM

Pre-Assembled Brackets

Galvanised



Alluminium or Galvanised

Pre-Assembled Pole Bracket

Watts	1 Panel	2 Panel
5-10W	DM110	–
20W	DM120	–
40-60W	DM175	DM275

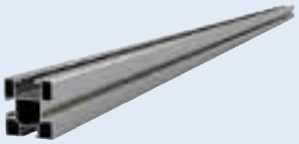
Pre-Assembled Triangle Bracket

Watts	1 Panel	2 Panel
60-120W	BMF4301	–
170-270W	–	DR275

Bracing Bar

Code	Description
BMF4302	4m Bar 13x6mm Alu.

Aluminium Profile - 4m



BMF4001

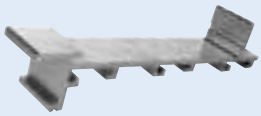
Cover for gap between panels - 4m

BMF4100

Profile Joint

BMF4003

Positioning Support



BMF4110

Solar Panel Clamps - (packs of 10)

End Clamp

Mid Clamp

End Code	Module Thickness
BMF4021	34
BMF4022	35
BMF4023	36
BMF4024	38
BMF4025	40
BMF4026	42
BMF4027	46
BMF4028	48
BMF4029	50

Middle Code	Module Thickness
BMF4011	34 ÷ 37
BMF4012	38 ÷ 42
BMF4013	43 ÷ 47
BMF4014	48 ÷ 50

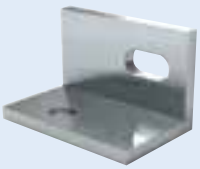
End Caps (packs of 10)

BMF4008

Clamp for Crimped Plate

BMF4501

Fixing Bracket



BMF4002

Adjustable Tile Hook

BMF4401

Fixing Plate: 150x55x5mm

Adjustable Roof Tile Hook

BMF4402

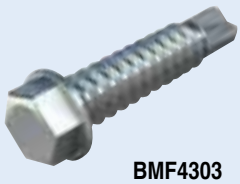
Fixing Plate: 50x200x5mm

Fixing Accessories - Stainless Steel

BMF4004

BMF4006

BMF4005



BMF4303

Code	Description	Pack
BMF4004	M8 x 20 Hammer-headed screws	50
BMF4006	M8 x 20 Hexagonal head screws	50
BMF4005	M8 Self-blocking flanged nut	50
BMF4303	4,8 x 32 Self-tapping hex screws	100

Due to our policy of continuous improvement we reserve the right of modifying specifications and appearance.

SOLAR MOUNTING SYSTEMS

We provide professional solutions for Solar photovoltaic mounting for residential, corporate and utility scale applications.

Features • Roof Top mounting: Tile, Tin & Tilt Tin/ tiled • Open area: Ground mounting/ pole mounting • Suitable for all roof types and PV modules
• Fast and simple installations • High quality material in Aluminium 6005-T5

Panel Mounting

Code	**CK-FZ-F4200**	**CK-FZ-SK**	**CK-FZ-AM**	**CK-FZH-01**
Description	Solar standard rail 4.2m	Solar standard rail splice	Adj Solar mid clamp	Solar SUS304 Tile Hook
Code	**CK-FZH-013**	**CK-FZH-TC**	**CK-FZ-AE**	**CK-FZH-021**
Description	Solar aluminium tin hook	Solar tin roof AL Clamp	Adj end clamp	Solar tin thin roof AL Clamp
Code	**CK-FZA-FL**	**CK-TM-1530**	**CK-2V-3035**	**CK-FSC-CP1**
Description	Solar Adj front leg	Solar Adj Tri structure 15-30	2V ground support 30/35 deg	Solar Cable Clips

SOLAR ROOF TILT RACKING SYSTEM

ACDC is continually developing kits to use with our panels. These kits are designed for the most rugged conditions and consist of the highest quality components.

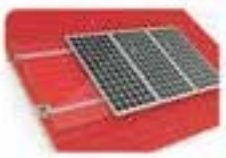
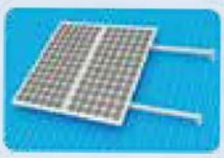
Code	**GR-AD-FL**	**GR-AD-FL 10/15**	**GR-AD-FL 15/30**	**GR-AD-FL 30/60**
Description	Front Support	Rear Support - 10-15cm	Rear Support - 15-30cm	Rear Support - 30-60cm

* Use the following Parts Code: **CK-FZ-F4200** (Solar Panel Profile)

Specifications • High class aluminium alloy Al16005-T5 & stainless steel 304
• PV Modules: framed • Roof Slope: up to 60° • Suitable for pitched or flat roof

8 PANEL MOUNTING KITS

Kits include:
- Frame work & Clamps
- Structure fixing bolts/nuts
- Profile 4.2m
- Suited for 170-290W

				
Code	**CK-PM-08**	**CK-TL-08**	**CK-TN0-08**	**CK-ADJ-08**
Description	Pole mounting kit	Tile mounting kit	Tin mounting kit	Tin tilt mounting kit
Code	**CK-TNC-08**	**CK-GD-08**	**CK-UT-08**	**CK-V2-08**
Description	Tin clamp mounting kit	Ground mounting kit	Utility Ground mounting kit	Tin tilt mounting kit

Due to our policy of continuous improvement we reserve the right of modifying specifications and appearance.

SOLAR OFF-GRID MOUNTING KITS

ACDC Dynamics provides complete off-grid mounting kits. These kits include all brackets and hardware needed to mount panels on any surface such as: walls, roofs, caravans, poles and etc.

Solar SLB series off-grid mounts. Fit for 1 Panel.

Code	SLB-0111	SLB-0112	SLB-0113	SLB-0102	SLB-0103
Module Frame	18mm	30/35mm	35mm	35mm	35mm
Mounting Holes	5.5mm x 8	3.5mm x12	4.5mm x 12	4.5mm x12	4.5mm x12
Module Power	5W	10-30W	40-135W	40-135W	40-135W
Mounting Type	Pole-Mounted	Pole-Adjustable	Wall, Vertical Surface Adjustable	Fixed Bracket	Flat Surface Adjustable

SOLAR-FLEX ADHESIVE

Solar-Flex white - 290ml

Code	WST-SAF-W

Elastic one-component adhesive and sealant with fast development of adhesive strength.

It contains no substances that hinder the coating of laquer (eg. silicone), no solvents and no isocyanate.

Solar-Flex has a very high initial adhesive strength and also enables adhesive bonds on vertical surfaces indoors and outdoors.

For strongly stressed adhesive bonds in the following areas:

- Solar Power systems;
- Junction Boxes;
- Marking systems;
- Metalworking;
- Tank and apparatus construction;
- Ventilation and air conditioning and wherever silicone or products containing silicone are unsuitable.

Advantages:

- High initial adhesive strength on vertical surfaces;
- Broad range of adhesion, even on moist surfaces;
- Resistant to weathering and UV;
- Free of silicone, isocyanate and halogen;
- Solvent-Free, odour-free, non-corrosive;
- Sandable & can be painted over even when wet.

P3

PV CONNECTORS IP67

Features

- For connecting to panel contacts
- Durable and weather-resistant
- Modules protected by means of one or more diodes
- Temperature Range: -40˚C - +90˚C
- UV-Resistant
- High-quality contacts
- Material: Contact: CuSn
  Casing: PC/PA

Code	Description	Cable Size
903709	PV panel box enclosure	2.5-10mm²

PV MC4 Female Branch Connector

For secure and easy connection of PV modules in parallel.
MFF= Male/ Female/ Female Connectors

Code	Description	Pack
905228-1	PV MC4 MFF Branch	1

PV MC4 Male Branch Connector

FMM= Female/ Male/ Male Connectors

Code	Description	Pack
905229-1	PV MC4 FMM Branch	1

PV MC4 Female Coupling Connector

Code	Core Cross	Cable Ø mm	Pack
905207-1	2.5mm²	3-6	1
905209-1	2.5mm²	5.5-9	1
905211-1	4-6mm²	3-6	1
904964-1	4-6mm²	5.5-9	1

PV MC4 Male Coupling Connectors

Code	Core Cross	Cable Ø mm	Pack
905206-1	2.5mm²	3-6	1
905208-1	2.5mm²	5.5-9	1
905210-1	4-6mm²	3-6	1
904963-1	4-6mm²	5.5-9	1

1000VDC UV Resistant

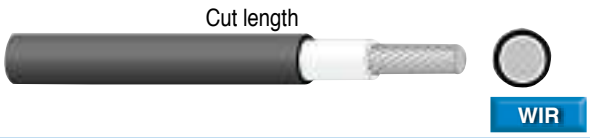
PV MC4 Fly-Leads

Code	Description
SLE-1M	1m 4mm PV Cable(Black) MC Male & Female
SLE-2M	2m 4mm PV Cable (Black) MC Male & Female
SLE-5M	5m 4mm PV Cable (Black) MC Male & Female
SLE-10M	10m 4mm PV Cable (Black) MC Male & Female

Due to our policy of continuous improvement we reserve the right of modifying specifications and appearance.

SOLAR CABLE

Solar Cable (100m roll)
- Rated Voltage: 600/1000VAC 900/1500VDC
- Stranded tin-plated copper insulated with XLPE under a PVC jacket.



Code	Size mm²	Amps
SW101-*	2.5mm²	25
SW102-*	4mm²	32
SW103-*	6mm²	41

*Add cut length to code: **5M**, **10M**, **20M**, **50M** or **100M**

INSTALLATION TOOLS & ACCESSORIES

Wire Stripper

Code STRIP-7-SOLAR

An automatic stripper for round cables used in PV solar and electric fence installation. Precise adjustment allows easy removal of multiple insulation layers of solar cables from 1,5-6mm².

Wire Stripper

STRIP-SOLARMINI

- Stripping depth stop
- Compact wire stripper designed for the solar industry
- Suits 1.5-6mm² cable
- Side blade cutter

X-PRO 50mm Shears

BM1325

- Innovative new spring loaded opening action
- For the easy stripping and cutting of cables
- Especially designed blade for cutting of aluminium and copper cables up to a size of 50mm²

X-PRO 50mm Shears

BM1330

- Innovative automatic opening system with spring for an effective cable stripping & cutting
- Innovative design with bi-component handles gaurenteeing less cutting effort & better palm hold
- Blade geometry with variable edge

Maxi Grip

BM1311

- Wire Shears
- Bi-Component handle for greater cutting force
- Non-slip serrated blades
- Tempered stainless steel blade
- Belt clip holder

Solar Tool Kit

PV-BOX

Aluminium box with foam cushion for PV tools. All tools in storage.

Solar Connector Spanner

PV-STX

SOLAR PUMPING SYSTEMS

- The system dispenses with energy storage devices, and stores water instead of electricity. It improves the reliability of the device and at the same time, it lowers the construction and maintenance costs of the system dramatically.
- Patented technology adopted for controlling, automatic running, excellent stability and 98% energy conversion ratio.
- Full protection against lightning, dry running, blocking and overload.

Application:
- Desert control
- Sea water desalinization
- Agricultural irrigation
- Daily water supply
- Forest irrigation
- Remote watering troughs for animals
- Waste water treatment

Code	KW	Description	Head (m)	Flow Water (m³/day)	No. of PV Panels
PS370-1	0.37KW	Solar Pumping System	27-35m	10-7.5m³/day	20 x 40W
PS550-1	0.55KW	Solar Pumping System	37-52m	10-7.5m³/day	20 x 60W
PS750-1	0.75KW	Solar Pumping System	45-61m	10-7.5m³/day	20 x 80W
PS1100-2	1.10KW	Solar Pumping System	54-73m	10-7.5m³/day	20 x 120W
PS1500-2	1.50KW	Solar Pumping System	68-91m	10-7.5m³/day	10 x 270W
PS2200-1	2.20KW	Solar Pumping System	91-133m	10-7.5m³/day	22 x 170W
PS3000-1	3.7KW	Solar Pumping System	118-169m	15-10m³/day	28 x 170W
PS4000-1	5.5KW	Solar Pumping System	155-207m	15-10m³/day	36 x 180W

Order PV Panels Separately

Inverter Only

Code	Rated Output Current	MPP Voltage
PB400L	3A	280-350V
PB750L	5A	280-350V
PB1500L	7A	280-350V
PB2200L	11A	280-350V
PB3700H	9A	500-600V
PB5500H	13A	500-600V

System incl Inverter, Pump + Cable 30m + Connections

Features:
- Solar pumping inverter converts DC voltage from the solar array into AC voltage to drive the pump.
- With the function of MPPT (maximum power point tracking), it regulates the output frequency according to irradiation in real time to achieve the maximum power.

Product Advantages:
- To drive pumps equipped with 3-phase induction motors.
- Optimized SPWM (Sinusoidal pulse width modulation).
- Various operation modes and MPPT algorithms are available.
- Option of water-level detection and control is available.
- Adjustable speed range of pump based on the actual situation (available solar power) of the system
- Protection functions: lightning, over/low input voltage, over current and overload protection, etc.

Due to our policy of continuous improvement we reserve the right of modifying specifications and appearance.

DC SUBMERSIBLE PUMPS

Features

- Floating impeller design prevents sand blockages
- Highly durable
- Can handle upthrust load

Application

- Domestic & Municipal water supply
- Irrigation
- Industrial & Mining
- Ponds & Gardens

Accessories Included

- Liquid Level Sensor
- Torch light
- Connecting cable
- Control Box
- Water level Sensor

Order PV Panels Separately

Code	Voltage	Power	Max. Flow Rate	Max. Head	Pump Size	Solar Panels
3TSS 0.5-28-12/80	12VDC	80W	0.5m³/h	28m	3"	100W x 1
3TSC 1.9-32-36/250	36VDC	200W	1.9m³/h	32m	3"	90W x 3
3TSC3.5-34-48/400	48VDC	400W	3.5m³/h	34m	3"	130W x 4
3TSC2-80-48/400	48VDC	400W	2m³/h	80m	3"	170W x 4
4TSS2.5-70-48/500	48VDC	500W	2.5m³/h	70m	4"	130W x 4
4TSS1.8-120-96/750	96VDC	750W	1.8m³/h	120m	4"	80W x 14
4TSS2.5-140-110/1000	110VDC	1000W	2.5m³/h	140m	4"	100W x 14
4TSC4-57-48/500	48VDC	500W	4.0m³/h	57m	4"	170W x 14
4TSC12.5-44-110/1000	110VDC	1000W	12.5m³/h	44m	4"	100W x 14
5TSS5-80-110/1200	110VDC	1200W	5m³/h	80m	5"	100W x 16

DC SOLAR FOUNTAIN PUMPS

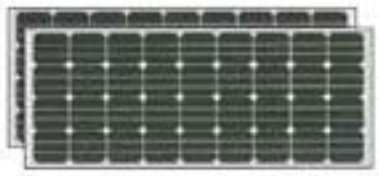
Accessories

Pump Controller, Brass Impeller, Cable Connector, Water Level Sensor, Cable for Solar Panel, Solar Flash Light.

Application Area

This product is mainly used for fountain pumps, circulation or small irrigation applications.

TSQB



Order PV Panels Separately

Pump Type	Voltage	Power	Max. Flow Rate	Max. Head	I/O Size	Required PV Panels
TSQB2.0-25-24/120	24VDC	120W	2m³/h	25m	1" x 1"	80W x 2
TSSGJ3.2-18-24/120	24VDC	120W	3.2m³/h	18m	1" x 1"	80W x 2
TSQB2.2-37-36/210	36VDC	210W	2.2m³/h	37m	1" x 1"	90W x 3

DC SOLAR POOL PUMPS

Accessories

Pump Controller, Brass Impeller, Cable Connector, Water Level Sensor, Cable for Solar Panel, Solar Flash Light.

Application Area

This product is mainly used for swimming pool pumping applications.

TSSP

Order PV Panels Separately

Pump Type	Voltage	Power	Max. Flow Rate	Max. Head	I/O Size	Required PV Panels
TSSP16-15-48/500	48VDC	500W	16m³/h	15m	1.5" x 1.5"	170W x 4
TSSP18-12-72/750	72VDC	750W	18m³/h	12m	2" x 2"	80W x 14
TSSP25-15-110/1200	110VDC	1200W	25m³/h	15m	2.5" x 2.5"	100W x 16
TSSP30-20-110/1500	110VDC	1500W	30m³/h	20m	3" x 3"	100W x 16

Due to our policy of continuous improvement we reserve the right of modifying specifications and appearance.

SOLAR GEYSER

Perfect for use as stand-alone unit or as a prefeed system for a geyser.

Filling Pump

Heating Element

Solcrafte Solar Hot Water Solutions

Solcrafte is a solar collector with an integrated tank. It offers various benefits such as frost protection, easy installation and aesthetic design. Quick installation saves you time and money. Solcrafte is the answer: connect it either directly to the water lines or pre-feed it into an existing geyser. Standard packaging includes a mounting kit (either on-roof @ 0º or flat roof @ 45º), a Twin Port valve and a Pressure Reducing valve.

Code	SOL 90-*	SOL 150-*	SOL 200-*
Number of collectors	1	1	1
Collector area	1.1m²	1.8m²	2.4m²
Tank size in liters	90ℓ	150ℓ	200ℓ
Size (L x W x H)	2184x510x212mm	2184 x 800 x 212mm	2184x1100x212mm
Max Temp/Pressure	100˚C/4 bar	100˚C/4 bar	100˚C/4 bar
*Mounting system **0° / 45°**	Incl.	Incl.	Incl.

Accessories

Code	Description
SOL-1279	Optional screw-in heating element (2kW)
SOL-1039	Filling pump with container hose and pressure pump (for filling and bleeding the collector system)
SOL-1037/ 5	Anti-freeze concentrate 5l (Polypropylene Glycol)
SOL-1037	Anti-freeze concentrate 10l (Polypropylene Glycol)

Optional - Pool Heating Set "Complete"

Code	Description
SOL-3172	Heating kit for swimming pools of up to 30,000 lt. Kit consists of 4 collectors, SWT20 heat exchanger, circulation pump and an 18 litre expansion tank

* Mounting brackets and Anti-Freeze not included.

HEAT PUMPS

Using a small amount of energy, a heat pump simply transfers heat from one source to another in order to create hot and cold water for residential, commercial and industrial applications.

Code	SDAW025-300L	SDAW3.5-220	SDAW4.6-220	SDAW6.7-220	SDAW11.2-380
Power Supply	220V / 1Ph /50Hz	220V / 1Ph /50Hz	220V / 1Ph /50Hz	220V / 1Ph /50Hz	380V / 3Ph /50Hz
Rated Heating Capacity	2.6KW	3.5KW	5KW	7.2KW	10.5KW
Rated Power Input	0.75KW	0.9KW	1.28KW	1.79KW	2.55KW
Refrigerant	R410A	R410A	R410A	R410A	R417A
Compressor Type	Rotary	Rotary	Rotary	Rotary	Rotary
Max. Outlet Water Temp.	50°C	60°C	60°C	60°C	60°C
Noise	48dbA	52dbA	53dbA	54dbA	55dbA
COP (heating/ work done)	3,5W/W	3,89W/W	3,91W/W	4,02W/W	4,12W/W

SABS SOLAR GEYSER

High Pressure System - SABS Approved

Code	Tank Length (mm)	Tank Capacity	Collector	Collector Area (m2)
ASHP-1858-15	1680	150L	15 Tubes	1.86
ASHP-1858-20	2160	200L	20 Tubes	2.49

Low Pressure System - SABS Approved

Code	Tank Length (mm)	Tank Capacity	Collector	Collector Area (m2)
SL-NF1.8-16	1225	100L	16 tubes	1.67
SL-NF1.8-18	1446	150L	18 tubes	1.88

High Pressure

Low Pressure

Order Mixing Valve Seperately

Code	SL6-C1301BX003
	Mix/Tempering Valve

Accessories for Low Pressure System - SABS Approved

Code	Description
SL-NF16-TUBE	Spare Glass Tube for 100L low pressure
SL-NF18-TUBE	Spare Glass Tube for 150L low pressure
SL-NF-FTANK	Spare filler tank for 100/ 150L low pressure

- Inner tank: SUS304-2B (Low Pressure), SUS316 (High Pressure)
- Working pressure: 0.6MPA (High Pressure), 0.1MPA (Low Pressure)
- Vaccum tube: 58*1800mm 2.2mm thickness with special coating to aid absorbtion
- Frame: Galvanized steel 1.5mm
- Insulation: 50mm of high density polyurethane foam - Heat preservation: 72hrs
- Hail resistance: 40mm

All the prices include tank, heat pipe vacuum tubes, frame, P/T valve, Air vent valve, Magnesium rod, screws & nuts and carton box only.

Due to our policy of continuous improvement we reserve the right of modifying specifications and appearance.

WIND GENERATORS

Deltatronic wind generators are the latest design in wind generating technology. Units are built for harsh environments using aluminium and stainless steel. Wind speed, vibration and generator RPM are electronically analysed and controlled. Fitted with an emergency electronic braking system. The high quality alternators fitted to the generators are manufactured exclusively for Deltatronic by Ducati energia.

Code	DTWIND-1500	DTWIND-3000
Maximum Power	1500W	3000W
Output Voltage	0-300VAC	0-300VAC
Aux. Voltage	12V x 2 (102Ah batteries)	12V x 4 (102Ah batteries)
Pure Sine Inverter	Yes	Yes
Charge Regulator	Yes	Yes
Start Speed	2.2m/sec (8km/h)	2m/sec (7.2km/h)
Run Speed	12.5m/sec (45km/h)	12.5m/sec (45km/h)
No. of Blades	3	3
Blade Dia	2.1m	3.1m
Temp Range	-20˚C to +45˚C	-20˚C to +45˚C
Wind Brake	Yes	Yes

***Kits Includes:** All accessories except the 6m mounting pole.
Mounting pole specification available from our technical department.

Spare Parts

Code	Description	Code	Description
6061T6	Aluminium blade for **DTWIND-1500/3000**	**DTKIT-2**	Complete body assembly
DTANE	Anemometer, wind speed monitor	**DTALT**	Alternator (same for both models)
JACK05	DT Wind System controller	**DTINV-1500**	1.5kW Inverter for **DTWIND-1500**
DTKIT-1	Ball bearings, slipring assembly, rectifier, gas shock absorber	**DTINV-3000**	3.0kW Inverter for **DTWIND-3000**
		SY120102	12V 102Ah Battery

HYBRID WIND & SOLAR TURBINES

Q-Series are small all-weather wind turbines which produce 400-1000W. These units are small in size, easy to install, low cost, high efficiency, and could be used in a variety of geographical climate conditions.

Kit Code	Q400	Q600	Q1000
Rated Power (W)	400W	600W	1000W
Rated Voltage (VDC)	24	24	48
Rated Current (A)	16	25	41
Rotor Diameter (M)	1.5	1.6	1.8
Start-Up Wind Speed (m/s)	2.5-4	2.5-4	2.5-4
Rated Wind Speed (m/s)	9.6	10.5	13
Max. Wind Speed (m/s)	45	45	45
Wind Turbine Type	Permanent magnet synchronous generator	Permanent magnet synchronous generator	Permanent magnet synchronous generator
Yaw Mode	Mechanical	Mechanical	Mechanical
Wind Turbine Lifespan	15-20yrs	15-20yrs	15-20yrs
Blade Material		Carbon Fibre Reinforced Plastic	
Blade Quantity	3	3	3
Tower Height	6m	6m	6m
Matched Inverter Type	Sine Wave	Sine Wave	Sine Wave

***Kit Includes:** Sine Wave Inverter, Wind Turbine, Blades, Pole and Wind/Solar Hybrid Controller

Hybrid Charge Controller

Code	SPWS05A-24	SPWS06A-24	SPWS10A-24
Wind Turbine Max Power (W)	500W	600W	1000W
Rated Battery Voltage (V)	24V	24V	48V
Wind Turbine Max Input Current (A)	40A	40A	60A
PV Max Charge Current	10A	10A	10A
Display	LCD	LCD	LCD
Output Voltage	28V	28V	56V
Output Current	0-25A (adj)	0-25A (adj)	0-50A (adj)

Due to our policy of continuous improvement we reserve the right of modifying specifications and appearance.

LINE INTERACTIVE UPS

Line-Interactive Modified Sine Wave UPS - Compact. C/W battery

Code	Watts	VA	Size (mm)	Standby Time	No. of batteries
D-650	390W	650VA	145 x 320 x 65	5-10min	1
D-800	480W	800VA	145 x 320 x 65	5-10min	1
D-1000	600W	600VA	165 x 370 x 140	5-10min	2
D-1200	720W	1200VA	165 x 370 x 140	5-10min	2
D-1500	900W	1500VA	165 x 370 x 140	5-10min	2
UPS-1700D	1200W	1700VA	165 x 370 x 140	5-10min	3
UPS-2200D	1320W	2200VA	165 x 370 x 140	5-10min	3

- Software CD (included)
- AVR Function. Auto voltage regulator
- Over charge/discharge protection.
- Overload and circuit protection.
- LCD Display.
- Full load backup time 4mins.
- Half load backup time 16mins.
- Wide input voltage range: 140-275VAC
- Output voltage: 230VAC ± 10%.
- Spare batteries 12V/7AH **SY1270**

KI Series

Line-Interactive Pure Sine Wave UPS - Units have built-in battery

Code	Watts	kVA	Size (mm)	Standby Time Full Load	Standby Time Half Load	DC Voltage
KI1000	700 W	1KVA	156 x 450 x 220	6min	10min	24
KI2000	1400 W	2KVA	198 x 525 x 347	6min	10min	48
KI3000	2000 W	3 KVA	198 x 525 x 347	6min	10min	72

- Wide Input Voltage: 150-300 VAC
- Output voltage: 220/240 ±2%

Application

- Commercial Facility
- Hub and Network device
- Data Centre
- Computer Room
- Point of Sale
- Router

- Digital Technology
- Intelligent battery Charger
- User - Friendly LCD Display
- Reliable online interactive design
- Fully Functional Protection
- Intelligent RS232 Communication Port
- Low Battery, Overload , short-circuit and over temperature
- Wide Input Voltage: 150-300 VAC
- Output voltage: 220/240 + /- 2 %

SERVER COMPACT UPS

KRJ Series

Online Compact Server UPS 1 phase - Without transformer. Units have built-in battery

Code	Watts	kVA	Size (mm)	Standby Time Full Load	Standby Time Half Load	DC Voltage
KR1000-J	700W	1KVA	440 x 500 x 2U	6min	15min	36
KR2000-J	1400W	2KVA	440 x 500 x 2U	5min	15min	72
KR3000-J	2100W	3 KVA	440 x 500 x 2U	5min	15min	96
KR6000-J	4200W	6 KVA	440 x 600 x 3U	5min	15min	192

Application

- Rack Device
- Computer Room
- Data Centre
- Hub and Network device
- Point of Sale
- Router
- Precision Instrument
- Commercial Facility Point

For Extended Operating Time please see UPS External Battery Cabinets on Page 31

- Output isolation transformer
- Wide input voltage range
- Full protection function
- High reliability and performance
- Intelligent RS232 Communication Port
- UPS management software (optional)
- External battery bank (optional)
- SNMP adapter or USB (optional)
- Wide Input Voltage: 165-275VAC
- Output voltage: 220/240 + /- 2 %

ONLINE UPS

KR Series

Pure Sine Wave UPS - Single phase 230V/230VAC. Without transformer. Units have built-in battery.

Code	Watts	kVA	Size (mm)	Standby Time Full Load	Standby Time Half Load	DC Voltage
KR1000 LCD	700W	1 KVA	156 x 400 x 220	6 min	15min	36
KR2000 LCD	1400W	2 KVA	198 x 490 x 347	5 min	15min	72
KR3000 LCD	2100W	3 KVA	198 x 490 x 347	5 min	15min	96
KR6000 LCD	4200W	6 KVA	255 x 640 x 700	5 min	15min	192
KR1110S	7000W	10 KVA	255 x 640 x 700	5 min	15min	192

Application

- IT Device
- Data Centre
- Telecommunication
- Commercial Facility
- Industry

For Extended Operating Time please see UPS External Battery Cabinets on Page 31

- Output isolation transformer
- Wide input voltage range
- Full protection function
- High reliability and performance
- Intelligent RS232 Communication Port
- UPS management software (optional)
- External battery bank (optional)
- SNMP adapter or USB (optional)
- Wide Input Voltage: 165-275VAC
- Output voltage: 220/240 + /- 2 %

KR31 Series

Pure Sine Wave UPS - Three Phase (IN) to Single Phase (OUT) Without transformer. Unit only uses external standby battery connection in Battery Cabinet. 400VAC 3 Phase +N/ 230VAC Single Phase.

Code	Watts	kVA	Size (mm)	Standby Time	DC Voltage
KR3110	7000W	10 KVA	255 x 640 x 700	See table for UPS BCP	192
KR3115	10.5KW	15 KVA	255 x 740 x 785	See table for UPS BCP	240
KR3120	16KW	20 KVA	255 x 740 x 785	See table for UPS BCP	348

Application

- IT Device
- Data Centre
- Telecommunication
- Commercial Facility
- Industry

For Extended Operating Time please see UPS External Battery Cabinets on Page 31.

- IGBT inverter & output isolation transformer
- High reliability DSP control
- Wide input voltage range
- DC cold start function
- Full protection function
- Intelligent RS232 /RS485 Com Port
- Intelligent battery monitor system - **MMBM** (optional).
- Wide Input Voltage : 380 +/-25 % VAC
- Output voltage : 220 +/- 1 %

Due to our policy of continuous improvement we reserve the right of modifying specifications and appearance.

ONLINE UPS

Pure Sine Wave UPS - Three Phase (IN) to Three Phase (OUT) Without transformer.
Unit only uses external standby battery connection in battery cabinet.
Battery & Battery Box to be ordered separately.

Code	Watts	kVA	Size (mm)	Standby Time	DC Voltage
KR-3310	8 KW	10KVA	400 x 800 x 1180	See table for UPS BCP	348
KR-3320	16 KW	20KVA	400 x 800 x 1180	See table for UPS BCP	348
KR-3330	24 KW	30KVA	400 x 800 x 1180	See table for UPS BCP	348
KR-3340	32 KW	40KVA	500 x 800 x 1600	See table for UPS BCP	348
KR-3350	40 KW	50KVA	500 x 800 x 1600	See table for UPS BCP	348
KR-3360	48 KW	60KVA	500 x 800 x 1600	See table for UPS BCP	348

- IGBT inverter and output isolation transformer
- 3 phases UPS allow 100% unbalance load
- Full DSP control, high reliability and performance
- Wide input voltage range
- DC cold start function
- Advanced battery charging management
- Intelligent fan speed control

Pure Sine Wave UPS - Three Phase (IN) to Three Phase (OUT) With Isolation Transformer

FR-UK33080	64 KW	80KVA	1200 x 800 x 1600	See table for UPS BCP	348
FR-UK33100	80 KW	100KVA	1200 x 800 x 1600	See table for UPS BCP	348
FR-UK33120	96 KW	120KVA	1200 x 800 x 1600	See table for UPS BCP	348
FR-UK33160	128 KW	160KVA	1200 x 800 x 1600	See table for UPS BCP	348
FR-UK33200	160 KW	200KVA	1800 x 800 x 2000	See table for UPS BCP	348

- ECO mode is available
- Intelligent RS232/RS485 Communication Port
- Advanced no-master-slave parallel technology (included)
- Intelligent battery monitor system - **MMBM-2** (optional)
- Wide Input Voltage: 380/400 +/-20% VAC
- Output voltage: L-N 220/230 +/- 1%, L - L 380/400 +/- 1%

Application

- Data Centre
- Computer Room
- Precision Instrument
- Intelligent Equipment

Extended Operating Time please see UPS BCP. For standby times, please see below

EXTERNAL BATTERY CABINET

C-Type Battery Cabinet, No Wheels

Model	Layer	Product Size	Battery Capacity	Quantity (Panasonic Size)
C-1B	1	280 x 190 x 220	24AH/17AH	2/3 PCs
C-2	1	470 x 390 x 310	17/24/38/65/100AH	10/6/4/2/2 PCs
C-6	2	420 x 450 x 600	17/24/38/65/100AH	20/16/12/6/6 PCs
C-12	3	780 x 455 x 900	17/24/38/65/100AH	30/24/12/10 PCs
C-20	4	950 x 455 x 1190	24/38/65/100AH	56/40/20/20 PCs
C-24	4	1150 x 455 x 1190	65AH/100AH	24 PCs
C-32	4	780 x 880 x 1190	65AH/100AH	32 PCs

A-Type Battery Cabinet, c/w wheels

Model	Layer	Product Size	Battery Capacity	Quantity (Panasonic Size)
BAT-A4	2	420 x 450 x 670	17/24/38/65/100AH	20/12/8/4/4 PCs
BAT-A8	2	760 x 450 x 770	17/24/38/65/100AH	36/20/16/8/8 PCs
BAT-A16	4	780 x 455 x 1360	24/38/65/100AH	32/32/16/16 PCs
BAT-A20	4	950 x 455 x 1360	24/38/65/100AH	40/40/20/20 PCs

EXTERNAL BATTERIES FOR EXTENDED BACK-UP TIME

	30 mins standby	1 hr standby	2 hr standby	4 hrs standby	8 hrs standby	UPS KVA	Series size KR-L-J	Series size KR-L	Series size KR 31-L	Series size KR 33-L
Number of Batteries	24Ahx3	38Ahx3	65Ahx3	100Ahx3	100Ahx6	1 KVA	KR1000 L-J	KR1000L-LCD	-	-
	24Ahx6	38Ahx6	65Ahx6	100Ahx6	65Ahx12	2 KVA	KR2000 L-J	KR2000L-LCD	-	-
	24Ahx8	38Ahx8	65Ahx8	100Ahx8	100Ahx16	3 KVA	KR3000 L-J	KR3000L-LCD	-	-
	24Ahx16	38Ahx16	65Ahx16	100Ahx16	100Ahx32	6 KVA	KR6000 L- J	KR6000L- LCD	-	-
	24Ahx16	65Ahx16	100Ahx16	100Ahx32	100Ahx48	10 KVA	-	KR-1110	KR3110	KR - 3310
	38Ahx29	100Ahx29	65Ahx58	100Ahx87	100Ahx80	15 KVA	-	-	KR3115	-
	65Ahx29	100Ahx20	65Ahx58	100Ahx87	100Ahx120	20 KVA	-	-	KR3120	KR - 3320
	65Ahx29	65Ahx29	100Ahx58	100Ahx87	-	30 KVA	-	-	-	KR - 3330
	100Ahx29	100Ahx58	100Ahx87	100Ahx116	-	40 KVA	-	-	-	KR - 3340
	100Ahx29	100Ahx58	100Ahx87	100Ahx116	-	50 KVA	-	-	-	KR - 3350
	65Ahx58	100Ahx87	100Ahx116	-	-	60 KVA	-	-	-	KR - 3360
	100Ahx58	100Ahx87	100Ahx116	-	-	80 KVA	-	-	-	FR-UK33080
	100Ahx87	100Ahx116	100Ahx145	-	-	100 KVA	-	-	-	FR-UK33100
	100Ahx87	100Ahx145	-	-	-	120 KVA	-	-	-	FR-UK33120
	100Ahx116	500Ahx174	-	-	-	160 KVA	-	-	-	FR-UK33160
	500Ahx174	-	-	-	-	200 KVA	-	-	-	FR-UK33200

Larger sizes available on request

Due to our policy of continuous improvement we reserve the right of modifying specifications and appearance.

AUTOMATIC VOLTAGE REGULATORS (A.V.R)

Output of this mains stabiliser is regulated to within 1% for input -15% to +20% of nominal range

Constant Voltage Transformer (C.V.T.)

Dimensions (mm)			Outlet	Model	Rating VA	Standard Voltage*
Height	Width	Depth				
260	188	360	1 x 15A	**TE 300**	300	230/230
260	188	360	1 x 15A	**TE 500**	500	230/230
260	188	360	1 x 15A	**TE 750**	750	230/230
260	188	360	1 x 15A	**TE 1000**	1000	230/230
330	350	400	1 x 15A	**TE 1500**	1500	230/230
330	350	400	1 x 15A	**TE 2000**	2000	230/230
330	350	400	1 x 15A	**TE 3000**	3000	230/230
370	426	450	2 x 15A	**TE 4000**	4000	230/230
370	426	450	2 x 15A	**TE 5000**	5000	230/230
420	460	600	Terminals	**TE 6000**	6000	230/230
420	460	600	Terminals	**TE 7000**	7000	230/230
420	460	600	Terminals	**TE 8000**	8000	230/230

*** Specify voltage when ordering. Other voltages made on request.**

Single Phase Voltage Regulator (Output load regulation 1% or 3% selectable) Digital display

Code	Output Amps	Output Connector	Size (mm)	Kgs
SDC-1000VA	4.35A	Socket	230 x 120 x 150	6.2
SDC-1500VA	6.50A	Socket	260 x 140 x 170	7.3
SDC-2000VA	8.70A	Socket	260 x 140 x 170	7.9
SDC-3000VA	13A	Terminals	310 x 220 x 250	11
SDC-5000VA	21A	Terminals	310 x 220 x 250	13
SDC-8000VA	34A	Terminals	430 x 465 x 305	22
SDC-10KVA	43A	Terminals	430 x 465 x 305	27

Single Phase Compact AVR (Output regulation 8%)

SR-500VA	2.1A	Socket	241 x 169 x 90	1.78
SR-1000VA	4.35A	Socket	241 x 169 x 90	4.3
SR-1500VA	6.50A	Socket	261 x 169 x 114	5.2

Specifications

- Technology: servo motor type transformer
- Input Voltage: 140VAC - 260VAC
- Input Frequency: 50/60Hz
- Output Voltage: 230VAC
- Efficiency: 98%
- Display: LED display input voltage/output voltage
- Protection: High voltage protection
  Low voltage protection
  High temperature protection
  Overload protection
- Delay time protection
- Short circuit protection

Single Phase Voltage Regulator (Output load regulation 3%) Analogue display

MVR-500VA	2.1A	Socket	248 x 170 x 158	3.8
MVR-1000VA	4.35A	Socket	263 x 180 x 170	6.2

Features

- Protection: High voltage protection
  Low voltage protection
  High temperature protection
  Overload protection
- Servo motor type
- Input voltage range: 140-260VAC
- Output voltage: 220VAC
- Analogue input and output voltage display

Single Phase Voltage Regulator (with zero - cross switching technology)

- (Output regulation 5%)

E-600	1.3A	Socket	210 x 140 x 135	3.0
E-1200	2.6A	Socket	210 x 140 x 135	3.5
E-2400	5.2A	Socket	240 x 160 x 120	5.3

Features

- Relay type automatic voltage regulator
- Input Voltage range: 140VAC - 280VAC
- Input Frequency: 50/60Hz
- Output Voltage: 230VAC
- Efficiency: 98%
- Output accuracy: ±5%
- Protection: High voltage protection
  Low voltage protection
  High temperature protection
  Time delay protection
  Short circuit protection

Due to our policy of continuous improvement we reserve the right of modifying specifications and appearance.

OFF GRID SOLAR SYSTEM APPLIANCE CALCULATOR

Name: _____

Company: _____

Telephone: _____

Email: _____

		Column 1	Column 2	Column 3	Column 4	Column 5
Appliance	**Guideline Power Consumption (W)**	**Actual Power Consumption (W)**	**Quantity**	**Peak Power Consumption**	**Usage in a 24h Period (Hours)**	**Total Power Consumption (Wh)**
EXAMPLE	500	100	2	200	6	1200
Lights	5					
Lights	18					
Lights	60					
Lights	100					
DSTV Decoder	100					
Radio	50					
Television	120					
Television	250					
DVD Player	40					
Hi-Fi System	100					
Computer	120					
Laptop	70					
Modem	10					
Network Router	15					
Inkjet Printer	130					
Laser Printer	400					
Alarm System	30					
Electric Blanket	70					
Fan	60					
Hair Dryer	1400					
Fridge	180					
Fridge	110					
Freezer	160					
Iron	1200					
Kettle	2000					
Toaster	1400					
Microwave	1300					
Washing Machine	900					
Dish Washer	2000					
Oven	3000					
Vacuum Cleaner	1500					
Pool/Water Pump	750					

TOTAL _____ **TOTAL** _____

Peak Power Consumption | Total Power Consumption

How to use the AC/DC Dynamics Appliance Calculator

Referring to the EXAMPLE in the first line; fill in your 'real' power consumption in Watts in the first column. In column 2, you fill in how many of the appliances you have if they have the same power consumption. In the third column you fill in how many hours in a 24 hour period you will be using this specific appliance. Once you have completed the first 3 columns, you will have to calculate your totals.

How to Calculate you Totals

Peak Power Consumption - Column 1 x Column 2 = Column 3
Add up Column 3 below

Total Power Consumption - Column 3 x Column 4 = Column 5
Add up Column 5 below

Once you have your PEAK POWER CONSUMPTION and TOTAL POWER CONSUMPTION, you can email us a copy of your sheet to *solarhelp@acdc.co.za* and we will calculate an off grid solar system based on your requirements.

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